

# SIERRA CLUB BULLETIN

VOLUME XXIV

JUNE, 1939

NUMBER 3

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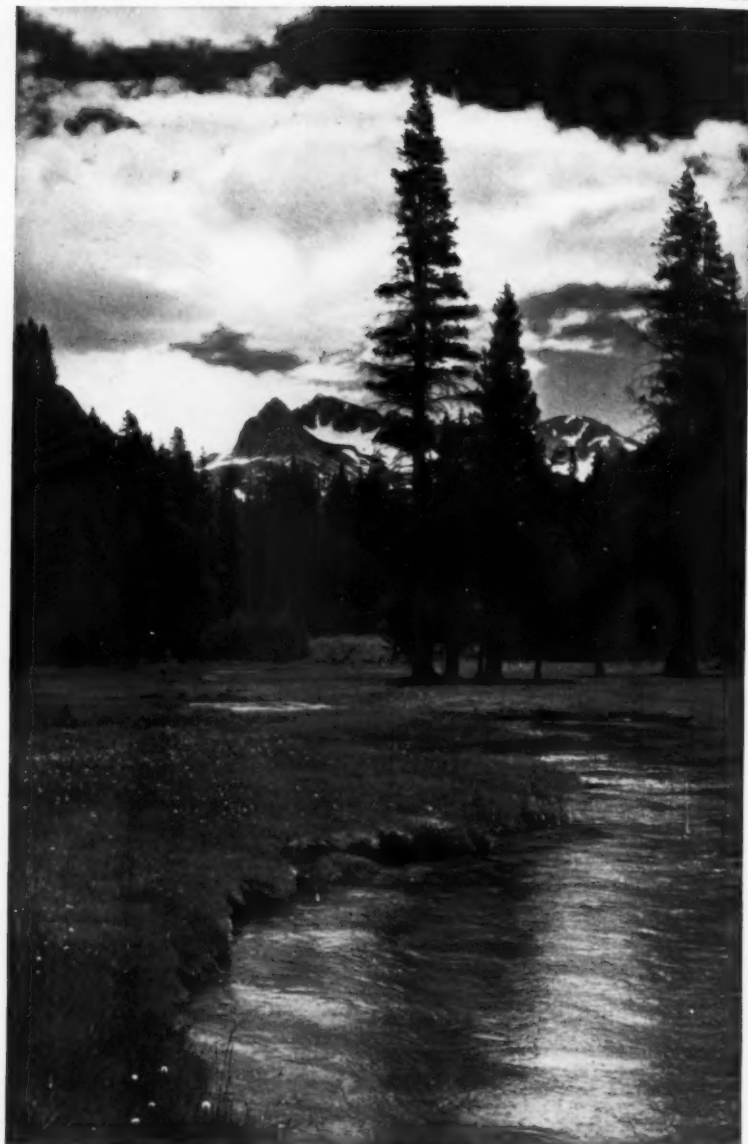
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CASCADE VALLEY AND MOUNT IZAAK WALTON AT THE HEAD OF FISH CREEK

By Herbert P. Rankin

# SIERRA CLUB BULLETIN

VOLUME XXIV



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## MOUNTAIN MEDLEY

BY HARRIET T. PARSONS

ASK any members of the 1938 High Trip what to them seemed to be the theme of this particular trip, and you will receive a diversity of answers.

"Rushing waters," rhapsodizes the lover of cascades.

"Unclimbed peaks," cries the searcher for summits.

"Bridges," mutters the engineering corps.

"Another itinerary," sighs the outing committee.

"Lines," grunts the impatient diner. And he doesn't mean fishing or clothes lines either!

"Creeks that aren't creeks but rivers," says the packer.

"Small fish," admits the fisherman.

"Hardly any fish," pouts the lady who catches them cooked.

"Music and moonlight," muses the poet.

"Snow," remarks the laconic realist.

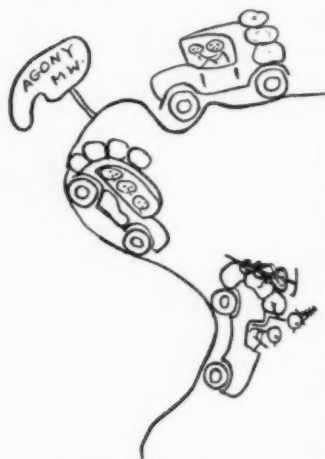
"Snow and shadow," gloats the photographer.

"Snow — snow and high water — blistering white snow — red snow — snow and rocks — hummocky snow — snow in starlight — snow in moonlight — Snow, Snow, More Snow," chants the chorus of realists, idealists, artists, musicians, valley-pounders, peak-baggers, camp lizards, first two-weekers, second two-weekers, and all-four-weekers, who made up the personnel of the trip.

And snow it was, with a rushing overcurrent of roaring rivers, and an entrancing medley of all the other themes thrown in and

mixed up in the delightful and inimitable way possible only on a Sierra Club High Trip.

It started with "Another itinerary." Was it Number Seven, or Number Eight? Whichever it was, with commiseration in our hearts for the poor harassed committee, those of us with no responsibility for the trip guided our cars over the mountains, south or north to Mammoth, and thence over Minaret Pass down into Agnew Meadow. The "Agony Road" gave us just a wry taste of what the committee had been up against in scouting to find us a place to spend our vacations. Roads closed over Tioga, Sonora, and no way in to



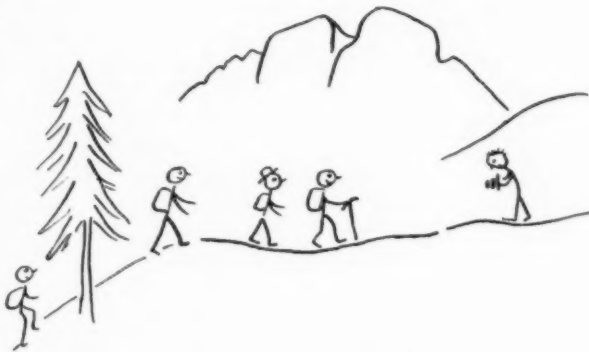
Tuolumne as planned. Snow said to be everywhere, and if the trails were as unlike trails as the Agony Road was unlike a real road, did it mean ice axes, ropes, and pitons to get the hikers from camp to camp? In some cases it actually did, but efficiency was at the helm, and the members of the Sierra Club suffered not at all from snow, poor trails, change of schedule, or any such acts of God. The committee may have suffered, but we lighthearted wayfarers were not aware of it.

Saturday, the second of July, the high-trippers began to arrive

in the Meadow, and by Sunday afternoon the personnel was complete. Rock-climbing practice for the earlier arrivals, and settling camp and unrolling beds for the later ones, kept everyone busy and engrossed. It was at campfire that night that we heard we were not on Itinerary Seven or even Eight, but on Number Thirteen, and before the trip was over might well be on Number Thirty-three. Garnet Lake, one of our expected camp sites, slumbered under eight feet of snow, which meant no feed for the mules, and no dry beds for the humans. For most of us the disappointment at not being able to camp at some of those favorite beauty spots was offset by the spiciness which changes and surprises always bring. We knew it would be beautiful, and it could not help but be fun.

The coldest night of the trip was that night in Agnew Meadow. The sleeping bags were frosted hummocks in the morning, and the ice was a quarter of an inch thick in unemptied wash basins. We shivered every half hour between fitful sleepings, and shuddered still more to think of the long month of wakeful freezing nights that lay before us. But our worst shuddering was then. It was cold later on, but never so hopelessly cold, or perhaps we became inured as time went on.

The next day we moved up the trail a few miles to a high bench below San Joaquin Mountain, not far from Agnew Pass. We spread our beds among casual snow banks, but the slight moisture underneath did not dampen our enthusiasm for the site, for we looked across the deep canyon to the magnificent view of Ritter, Banner,



Rodgers, and Lyell, rock-topped, but wrapped in snow from shoulders to feet. More cold nights, but no one minded lying awake for a while with the moon to watch, shining on the distant snowy peaks. When it became too cold and lonely, and one wondered if the night would ever end, a white-crowned sparrow sometimes broke the still air with his sudden song, and for a few moments the night seemed warmer.

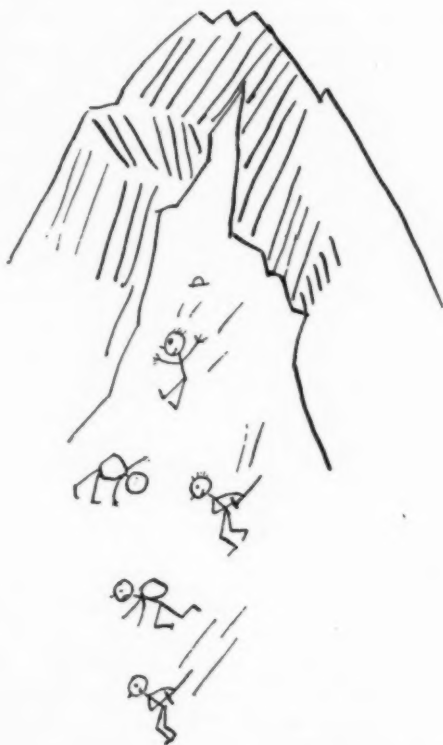
During the three days spent at this wonderful spot, climbs were made of San Joaquin Mountain and of the Two Teats, and pleasant and profitable nature-walks were taken under the fine leadership of Dr. Bryant of the National Park Service. Those with geological

interests were delighted to find that we were encamped on top of fascinating volcanic hexagons, whose origin Dr. Hills explained clearly to the callow laymen. We were forever grateful for the "information vegetable animal and mineral" which these two had, and so generously passed on to us.

Over the pass on July 7, to slide down past little turquoise-blue, icy lakes, on snow most of the way, through pines and beautiful stands of hemlock, to the deep, wide, green waters of Rush Creek, above Gem Lake. Here we camped among lodgepole pines and on granite slopes. Magnificent water poured down over these slopes, rushing in our ears night and day, to join the full swift creek just above commissary. It was an exciting day for the horsemen and mules, floundering through snow and bogs to reach the camp. Those on foot had a short easy day of it, except for Norman Clyde's party, which set forth ostensibly to climb an unclimbed peak on the way. They arrived at Rush Creek about nine o'clock with the nubbin unclimbed, so Norman went on with the hardier souls following, and made a first ascent of Blacktop Peak, arriving home in time for dinner. Carson Peak, from which is an unsurpassed view of the surrounding country, was climbed by others en route. There was an orgy of first ascents from this camp, and every campfire had its tale of a first, and a fine climb, and a finer view, and an even finer glissade.

A knapsack party left Friday morning for Mount Lyell, to camp in the snow, climb on Saturday the ninth, and join us at our next home on Sunday. As we were all camped among snow banks, and as there was a fine refrigerator in commissary, only a small group of twelve felt it necessary to go on the Lyell trip for arctic experience. They had a long march, with packs on their backs, to their base camp, which, although on the snow, was snugly tucked in among protecting *albicaulis* pines. Most comfortable of all the *albicaulis* beds was Madi's "boudoir," picked for her because she was the only girl on the trip, but admittedly deserved, for she did all the cooking, and reports were that it rivaled if it did not surpass Martin's. The climb was reported interesting but not too difficult, the most exciting part being a glissade down a very steep couloir. Another night among the *albicaulis*, a jaunt over an unnamed peak, and a tiring stretch over Thousand Island Pass, brought the party home to the main camp.

Although Thousand Island Lake was frozen over, we were able to make camp not very far below it. Most of us went over the hill from Rush Creek in order to see the lake on our way. "Cross-country trip," even the shortest, means the freedom and exhilaration of un-



trodden ways. Snow-slopes and granite slabs; little frozen lakes; unexpected rivulets; perhaps a cony; perhaps a water ouzel. This cross-country saunter dropped us down by the large snow-covered lake, where wisps of albicaulis stuck up here and there as silent witnesses of the islands below the heavy white blanket.

A short distance down the trail we camped by a small, demure brook, the smallest water supply so far, but with a fine rushing

gorge below us, and snow-covered granite slopes across. Later that afternoon the Lyell group returned, brown, enthusiastic, but not sorry to leave for a while, the precarious and tiring snow-hummocks: only sorry to have to stand in line again for their dinner!

The second week of the outing began with a climb of Banner Peak. Three parties started, but merged before very long, and thirty in all reached the summit together. A steep icy slope, where ice-axes came in very handy to cut steps, plenty of rock-scrambling, a wide view from the top, and rock gardens yellow with the brilliant little draba, made the climb varied and interesting. Finally sun-pitted snow to wobble tired legs on the way home and show us what the Lyell knapsackers had to undergo with packs on their backs. "Hummocky" was no stretch of the playwright's imagination in the sophomore show, when he named it as one of the "blights"!

It would be an oversight not to mention the First Ascent of Commissary Peak, or K 13, located just across the little creek from commissary. This was accomplished by Norman Clyde and Ed Turner after a great deal of remarkable snow technique in the first part of the climb and even more remarkable rock technique near the summit. Several important items of equipment were almost lost en route, but were recovered in the nick of time.

Tuesday, the 12th, we moved again, to a site between Shadow Lake and Lake Ediza, where two creeks converged just below a plunging waterfall. Lodgepole pines, as usual, formed the main uprights to our celestial roof and scenic walls. Volcanic Ridge, across the water from us, rose steeply above trees, white snow, and dark rock. The steepness of its slopes was well demonstrated a quarter of a mile down stream from camp, by the remains of a terrific avalanche which had recently swept down the side of the ridge, across the creek and wide marshy flat, and up the other slope, leaving fallen timber and shattered branches in its wake. A short scramble to the smooth granite above the sleeping quarters revealed Banner, Ritter, and the Minarets, in all their rugged beauty, and, in the opposite direction, a fine view above the treetops down Shadow Creek.

Everyone went climbing the next day. Some went up Clyde Minaret, the highest of the group. Jack Riegelhuth led the first ascent of Minaret A, and, in consequence, it is now known as Riegelhuth Minaret. Minaret C, presumed to be unclimbed, was found



by Oliver and his party to have been climbed several times before, but they went over to the west and ascended another unnamed peak, so that the record of "an unclimbed peak a day" could be kept unbroken. Several parties essayed Volcanic Ridge, a small group going up one way for more intricate climbing, and the others following an easier route. Three little peaks were upped and downed along the ridge, and the final view from the highest one, overlooking Minaret and Iceberg lakes to the Minarets, and Banner and Ritter beyond, was worth all the scrambling to get there. For some, the slide down the snow on the way home was their first experience in glissading, but almost everyone had come in contact before, with the hummocky snow filled with sunpits that was the wearisome theme at the end of every trip.

Bastille Day, and Dick and Doris's wedding anniversary! This was a lazy day for many; although Norman took another party up his Minaret; Minaret E became Turner Minaret; and Bob Thompson led a "grandmother" trip up Volcanic Ridge. These grandmother trips were a great institution, as they were primarily for those who wished for a not-too-strenuous day — an easy day for a grandmother, in other words. An exemplary idea. It's all in the point of view, however; for one freshman was heard to remark that the reason they were called grandmother trips was that you felt like a grandmother after you'd been on one. At dinner there was mince pie in honor of the Leonards, and a marvelous cake by Martin, beautifully decorated. Virginia Adams and Dave Brower rode in during campfire, and the program was greatly enriched by Virginia's singing.

It was strange not having the pack train with us. We had fleeting



glimpses of our invaluable but temperamental friends, the mules, who would appear in order to take us to camp and leave us, then disappear until our next move. However, mail was brought in and taken out, so we felt somewhat in reach of the outside world. An art exhibit added another civilized touch, and it was surprising to find how many people had found time to record their impressions with pencil or paint, and pleasing to see how well they had done it.

Ritter was climbed by about eight persons, the other ambitious seven who had signed up to go having apparently awakened that morning and thought better of it. A small point in the corner of Leonard Minaret entertained a few at luncheon also. All the parties got back early that afternoon, slipping and floundering as usual through the sun pits, but not too tired to enjoy with everyone else the sophomore show which was put on that evening. "Snow Sprite and the Seven Blights," written by Douglas Soulé, was a clever and amusing skit, well directed and well acted. The poor little washer-girl going on the High Trip picked up her equipment on the trail as she went along. (Ask Oliver, if you are in doubt about the possibility of this.) Later she encountered the blights — Hummocky, Blistery, etc., and the audience suffered with her, until Prince Kip came to the rescue.



Saturday morning we all started down the trail, past deep-cut Shadow Lake, to emerge suddenly, with the canyon of the San Joaquin just below us. The first two-weekers went sorrowfully back to Agnew Meadow to climb into their cars and return to the cities. The all-four-weekers, except for the drivers of cars, toiled through hot, depressing Pumice Flat to reach the low elevation of Reds Meadow and the camp on the sharp right angle of the swift San Joaquin. The drivers returned with the first two-weekers to Agnew Meadow, and then each drove in solitary splendor over the much-improved Agony Road, and on south to the Pine Creek Pass road-head. Many of them detoured to Bishop, some on important errands, others it was whispered, to indulge in large meals. Due to these

protracted visits to the "fleshpots of Bishop," there were moments of worry among the ascetics waiting at the road-head. There are many definitions for the word "shuttling," and many descriptions have been given of this particular arrangement for leaving all the cars at Pine Creek, and yet getting all the drivers back to Reds Meadow. Suffice it to say, that eventually everyone got back to camp, and on Sunday all unfinished shuttling business was more or less satisfactorily completed.

Dinner that night was as strange for the old inhabitants as for the newcomers. Campfire seemed enormous, with everyone present, and so many new faces that the old ones were blotted out.

Sunday was a loafing day, Rainbow Falls and Devils Postpile being the main outposts of interest, while the main center of activity was the hot mineral baths. The low elevation, of only 7500 feet, and the warm weather affected all those who were used to higher altitudes, and the apparent feebleness of the first-weekers puzzled the newcomers.

We were not sorry to leave on Monday morning for Fish Creek, although it was hot walking and still low in elevation. If it had not been for the heat and the oppression, we would have been able to appreciate the trail more adequately. Few of us will forget, however, the refreshing view from the granite "Balcony," which overlooks the Middle Fork of the San Joaquin, or the luscious meadow of shooting stars, rein orchises, wild geraniums, and delicate grasses, suddenly seen as we jumped a creek that slid curving over the smooth rock.

The following morning things began to get interesting. The pack-train was with us now, and we were face to face with the problem of whether the supplies and dunnage could be carried across the swift and deep waters of Fish Creek. We were to go to Cascade Valley, a climb of only about 2000 feet and not very many miles, but we could not go until a bridge was provided for us and it was determined that the mules could manage the water. Work had been done the day before on rigging up a rope for slinging things over, slightly mysterious to the uninitiated. But the great tree-felling was still ahead of us. In charge of Gale Siegel, woodsman, from the land of Paul Bunyan, a husky crew of sawyers worked on a great Jeffrey pine. Photographers and other onlookers crowded around to watch. Those inclined to impatience or boredom were amused

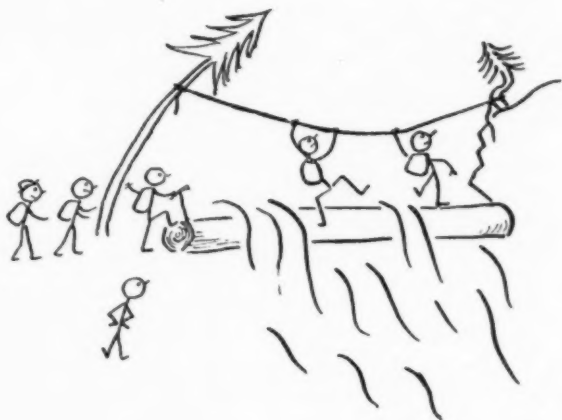
and entertained by the two blind singers with accordion, ukelele, and tin cup. But they had not too long to wait. Gale can do with a tree what Robin Hood could do with an arrow, and, holy old mackinaw, what a fall it was! With true aim, it fell just exactly where it was supposed to fall. Unfortunately, it broke in the middle and the waters rushed over the break, but the crew dropped a small poplar tree across the pine, and, with a little clearing, the bridge was complete. The mules were then loaded with three dunnage bags each, instead of the customary five, and the packers took them through the water one or two at a time. All got over safely — a truly remarkable achievement. The commissary cache went across rapidly on human backs over the new bridge, and soon we were given permission to start on to the next camp.

Our two days at Cascade Valley were easy for some and strenuous for others. The fishermen at last showed evidence of success. Purple Lake, near at hand, was most popular for fishing, picnicking, and in-and-out-again swimming, while snow-bound Virginia Lake farther away, gave the scenery-seekers even more to exclaim about. There was a first ascent of Mount Izaak Walton, by a small party, and other peaks, unnamed and hitherto unclimbed, fell to select groups.

On the second day the cache was sent ahead to the next camp. Although sunny that morning, it became cloudy soon after lunch and we were treated to a hard thunderstorm with pelting hail. This soon turned into rain again, and made dunnage-drying a very necessary activity. A large fire in commissary greeted wanderers on their return. "Of course," it cleared before night, and little individual evening campfires drying damp clothes, and the lenient weighmaster in the morning, were all that reminded us of the rain.

An early start was the order for the morning of the 22nd, as it was to be a sixteen-mile day — over Silver Pass, and far, far beyond. Oliver calculated it as fourteen miles, and Dick made it eighteen, so we were offered the compromise of sixteen, but at the end of the day there were still differences of opinion, varying with the state of fatigue of each individual. The climb up to Silver Pass proved to be not too severe, however, and, once beyond the wide snow-field that lapped its whiteness over the flat saddle, it was all down hill and fairly easy going — first, a long barren plateau, then, a quick drop to the crossing of the North Fork of Mono Creek. Just above

the crossing a stream plunges over the smooth granite in a beautiful and terrifying cascade. Beautiful, because of its height and its unusual appearance too steep to be called rapids, yet not quite a true waterfall. Terrifying, because our crossing was just below it, and the water came with such fullness and force as to pour right over the log. Ropes strung by the engineering corps allayed our fears, and allowed us to pass in safety. The trail continued down the North Fork until a right-angle turn to the left brought us to Mono Creek. There, opposite the Second Recess, we found our camp, located among aspens and pines, beside swift, icy waters.



Two explorers made a cross country trip from camp to camp, which included the first ascent of the high peak east of Silver Pass, and a most interesting traverse of beautiful country, ornamented with little lakes. Another group turned off at the pass to climb Mount Izaac Walton and some small pinnacles near by, and then returned to the pass and took the regular trail into camp. The only casualty of the long day was caused by the mistake of one hiker who turned down Mono Creek to Vermilion Valley, instead of up to the Recesses, and had to spend the night out.

After such a strenuous day as Friday, Saturday came as the logical rest day, and many of us stirred no farther than five hundred feet from our own particular quarters. There was a dash for parkas

and tents when the afternoon rain came an hour or two earlier than usual.

Sunday morning, not bright and early, but eventually, the Knapsack Trip to Lake Italy heaved packs on backs and started up the Second Recess. They turned up Mills Creek, where they met a large group of "grandmothers" who very kindly fed them tea before leaving them to their weighted progress. They camped on a beautiful little lake below Mount Abbot and Mount Gabb. The following day half of them climbed Abbot and the other half Gabb, and descended in a thunderstorm, a presage of what was to come. They camped on the bleak, barren shore of icy, snow-covered Lake Italy, where wood had to be hurled down from the sparse *albicaulis* that grew on the ledges above. It rained again early that evening, and continued all through the night. The next day, they climbed Bear Creek Spire, sliding off the monolith of the summit just as the electricity began to buzz in their ears and cause their hair to stand on end. It hailed and snowed for the next few hundred feet of the



descent, but by the time the high-growing polemoniums had been left behind, the storm was gone, too. A clear, cold night followed, freezing the narrow strip of water by the shore. Then in the morning, packs on backs again, they went over the ridges and high passes — where again polemoniums bloomed profusely and rosy finches hopped curiously near — down through the bleak, rocky wastes of Granite Park to the final drop down a gully to French Canyon, and on into camp at Hutchinson Meadow.

While the knapsackers were losing themselves in the vastness of

the high country and their own important affairs, the main party was far from idle. Several trips were taken besides the one up the Second Recess and Mills Creek, and Dick led a first ascent of a peak near the Fourth Recess, the most beautiful of all the Recesses. No one who was present that evening will forget the marshmallows and doughnuts which Martin and Barbara provided at campfire. As everyone will agree who has tasted them, each doughnut Martin makes is a poem in itself. And then came the forty miles in three days, which does not give much time for loitering.

On Monday these famous Three Days began with a trail which apparently climbed a mountain continuously but never got anywhere. Finally, after proving without any question that no summit was to be reached, it flattened out on a ridge, and wound down a surprisingly short way to Bear Creek. The unusual, long-spurred columbine, yellow, lavender and pink, among the rocks, and other flowers in the beautiful meadow-gardens, cheered the wayfarers and the usual afternoon shower refreshed the air. A few of the party went directly to the new camp, but the majority, led by all the famous leaders present, took the "Vermilion Valley Side Trip." This was a bit of extra mileage the purpose of which has not yet been adequately explained. Perhaps it was to see how vermilion the valley really was, or to try the old trail to Bear Creek along Bear Ridge. Each leader declared that he was following another leader, and, of course, all the followers were just following leaders.

Camp was beside the fine big creek, which swirled ceaselessly around its rocky islands. In men's camp was a finely sculptured bathtub, visited by everyone, to see and admire, if not to use, before the departure the next day.

What a day, what a day! It was a long trip to begin with, up Bear Creek, on and on, past Marie Lake, over Selden Pass, and down by Heart Lake to a lovely place near Sally Keyes Lake. That was Tuesday, and the day of the Great Rain, the same one that was soaking the knapsackers at Lake Italy and other campers in the Sierra. It rained and rained. The pack train got held up in some way on a ledge, but succeeded in reaching camp eventually. The hikers existed for long hours in ponchos and waterproofs, and upon reaching camp, huddled under the dripping but sheltering spread of the commissary tarp. It continued to rain and rain. But there were plenty of oldtimers to tell tales of worse wetness to cheer the



doubting freshmen. Better than oldtimers' yarns, however, was the lull in the rain which came at just the right moment for the sunset light to illumine the rugged summit of Mount Henry.

The third day dawned, tentatively rainless after the wet night, and it was possible to pack up without too much anguish, although with plenty of overweight moisture. This was truly a long day, with the rather abrupt drop into the South Fork of the San Joaquin, an easy saunter along its valley, and then up into the spectacular Piute Canyon, with its steep sides and twisting cut, until late in the afternoon the wide stretches of Hutchinson Meadow were reached. Some people went cross country to come into Piute Canyon higher up, after an interesting scramble on the way. It was a tiring day, especially for engineers and commissary, but weary spirits were cheered by the large mail which had arrived. The lodgepole pine, under which it was distributed, had the appearance of a Christmas tree, so many packages lay beneath it. These packages were the cause of a round of parties, which started the next day and continued without cessation for the two days left to us in the meadows. The knapsack party from Lake Italy returned that night, and vied with the main party in telling of the strenuous last three days. They had to admit that perhaps the main party had covered more miles, but denied that they could have seen more interesting country.

Thursday afternoon, a de luxe party, with mules to carry its dunnage to base camp, set out for Mount Humphreys, and an early start next morning got the group which went by the usual route onto the summit in good time. A small party climbed directly up the west face. There is no more dramatic view than that from the summit of Mount Humphreys, especially in a year of abundant snow such as this was. The great snowy Humphreys Basin, with Desolation Lake in its center, is spread below to the west, the icy slopes of Glacier Divide rising abruptly beyond. Farther to the west, and to the south and north, the white-shouldered mountains hold up their cold gray crests. It is a barren, arctic world. Eastward, on the other hand, the colorful Owens Valley lies sunning itself in warm reds and yellows, and a twisting ribbon of green widens into the darker green town of Bishop. The yellow pales into corn color and merges into the distant opalescent mountains. It is a world of narrow fertile valleys in the midst of hot deserts. It was hard to depart from this spectacular contrast, knowing that all too soon we would have to

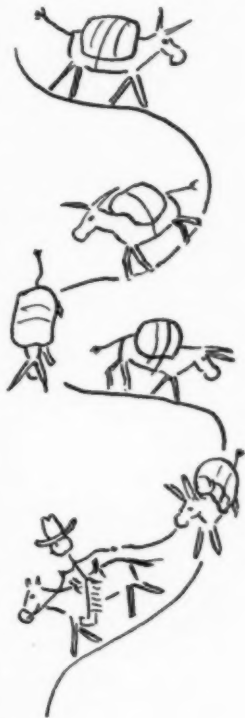


leave our snowy heights for the valleys far below, and just now we much preferred the high country.

The last day of our sojourn came, however, even before we were aware of it. It was an easy jaunt up French Canyon, with a hardly perceptible climb to Pine Creek Pass. At the summit of the broad rock-strewn pass we perched like sparrows, and scraped our jam jars empty for our final high mountain sherbet. Then we began the downward trend, pleasant going for a while, past cool Pine Creek Lake, until we reached the Thirty-seven Switchbacks. Taken slowly, with time to look at the mauve walls of Pine Creek Canyon that frame the warm colors of the valley below, with an occasional twisted juniper to offer shade, and with brilliant lichens on gray rocks to gladden the eye, it was a lovely trail. Taken fast to get there quickly, it was a knee-punishing ordeal. Where were the snows of yesterday? Sunpits and all, we longed for them.

But all things must come to an end, even such a medley as our summer. Its roaring rivers and its frozen bridges; its laughter and its blisters; its snow-fields and its dark woods; its violin music and its mountain canaries; its rocky beds and its sweet sleeps; its cool starlight and its hot sun: all was coming to the final note.

Cars were tested, the mules came in, the dunnage was dumped off. We loaded our cars, and said goodbye to our friends cheerfully, knowing that it would be but a short year before many of us would be together again. The feeling of finality came only when the pack train — no longer a train, but a herd of carefree mules — thudded out of our sight into the sunlit dust-clouds of the homeward road. Sadly we followed, and the concluding note was played.



## A FRESHMAN'S IMPRESSIONS OF A HIGH TRIP

BY BLANCHE STALLINGS

I AM "just one of the freshmen" who went with the Sierra Club on its 1938 outing. These personal impressions, experiences, and observations are mere samples of freshmen adventures.

Before the trip I had heard older members talking about the pleasant activity of selecting bed-sites. It all sounded so exciting that I could hardly wait to get up in the mountains and start looking for suitable trees, water supplies, and views. On the first moving-day I walked part of the way with another freshman girl. We wondered if we should try to get into camp early so that we might be sure to get good camp-sites. Then we both decided that if there really were only a few choice spots it didn't make much difference whether we or someone else got them; that we would enjoy the scenery and trust Providence to save a good bed-site for us. Most of all, we were already getting that grand, expansive feeling and knew that there was going to be *room* — plenty of room — in these mountains. The managers chose such ideal camp-sites that the big question was not, "Is there room for everyone?" but, "Which spot is the most desirable?" "Shall I camp in the little meadow by the stream, high up under the big juniper tree, between these two pines, over by that big log, or on this smooth, clean granite?" All the camp-sites were pleasant; for everyone was the guest of nature here, and who can say which of nature's rooms is the most charming?

When I first read over the suggested list of equipment given in the outing announcement I noted many things listed which I had never even heard of, for when it came to mountaineering as the Sierra Club does it, I was certainly a novice. Gradually I was able to find out here and there what the various items were and what they were for, but there was one thing which I never could figure out (and somehow I always forgot to ask when I was talking with those who would know), and that was why they suggested taking a pocket level. I knew they weren't going to build houses. Why a level? I even discussed it with my brother, a clever mountaineer and camper in his own individual way but not learned in the way of Sierra Clubbers. Why a level? We thought and thought. Well, we knew

that engineers used levels, so maybe it had something to do with building trails or bridges, but for the crude sort of engineering which one would suppose to be necessary on such a trip, would they need a level, or would they need 150 of them? Why a level? We finally decided that I should let the engineers take the levels, and so I dropped the matter.

But experience is a marvelous teacher. The next time I thought of the levels was at the second camp of the outing, near Agnew Pass, after a memorable first moving-day. I had a beautiful camp-site but had to work and work on the bed. It looked wonderful, but why did it feel so queer? Oh, yes, to be sure, the feet were higher than the head. I kept working on it, lying down to try it, getting up, and trying again. After going through this up and down process for some time it began to dawn upon me that, regardless of what anyone else used them for, as far as I was concerned I knew at last "why the level?"

What would high-trippers wear? I was sure it would be something very smart, for did not the best mountaineers in the country go on Sierra Club outings? I had been told that jeans were just as good as anything and that anything was all right, but I think I still had, floating around on the outskirts of consciousness, a sort of vision of an outing party looking like the handsome ranger-naturalists in Yosemite Valley.

The first two high-trippers that I met were both in jeans. Before we reached the mountains the information had come out quietly that jeans were "practically a uniform" for outings. I couldn't believe it — that is, I did in a way, and yet I didn't somehow. But I made a mental note: "Good mountaineers wear jeans."

When the outing party joined the mosquitoes at Agnew Meadow I didn't see a thing that resembled a park ranger's outfit, but I do remember one definite impression. About the first person that I met when we piled out with our dunnage bags was Madi Bacon. She had just arrived, too — from Chicago by air — literally dropped down out of the sky to join the outing party. She happened to choose a camp-site near mine for the first night, and we were talking as we unpacked. I was amazed to see her drag out of her dunnage bag a pair of middle-aged blue jeans with red polka-dot print pieces on the bottom. "They were . . . . too short," she said, (or something like that), as she sorted over boots, books, pajamas, socks, etc., "and

I had this material . . . . so I just . . . . sewed these pieces . . . . on the bottom." I made a mental note: "Good mountaineers wear jeans with print pieces on the bottom."

Another early impression was of seeing a man around the commissary the first morning who was dressed something like a hired man on a farm. About the same time I also noticed that certain other distinguished members wore neat, well-tailored outfits. Mental note: "Good mountaineers dress like hired men or wear attractive, well-tailored costumes."

When I heard that Dr. Harold Bryant, Assistant Director of National Parks, was in camp and was conducting a nature walk, I was delighted. I joined the party and began looking for a park service uniform with a lot of decorations to identify the official from Washington. I saw, instead, a kind gentleman, with a rugged out-of-doors look, in plain, comfortable-looking clothes, shirt open at the neck. Mental note: "Good mountaineers who are directors of National Parks wear comfortable clothes, not smart uniforms, on Sierra Club outings."

As a new member I was eager to know the president of the club. I do not remember just when I first saw the Hildebrands or what they had on, but from general impressions, a mental note might have been: "Good mountaineers who are presidents of the Sierra Club and wives of presidents wear simple clothes which any high-tripper might wear, but with an air of outstanding neatness, cleanliness, refinement, and quiet distinction."

The first rain-storm called forth an interesting variety of waterproof coverings, ranging from the sturdy and dark to the gay and fairy-like. There was the poncho (theme with variations), the cape or cape-with-hood idea, the nicely tailored raincoat, the parka, the coat-and-trouser arrangement, the assortment of unique original inventions. All of these styles looked well on any type or size figure, but were especially attractive when draped over huge knapsacks. Mental note: "Good mountaineers take to the rain in anything that is waterproof."

Every day there were new combinations to be seen in camp, such as delicate-colored slacks, or bathing-suits, with huge, heavy boots and wool socks; riding trousers with tennis shoes. Mental note: "Good mountaineers wear anything — anything they can get around the mountains in." Yet how interesting, how picturesque, how de-

lightful they looked! What a pleasure to see so many people wearing what they felt like wearing; to see the neat ones staying neat, those that didn't give a darn just not giving a darn, nobody caring how anybody else dressed, and everyone liking everyone else just the same!

Before the outing my concept of mules consisted of vague impressions of animals with long ears and stubborn dispositions. Hearing Mr. Colby give a side-splitting account of the behavior of a large, black mule on an early outing did not just exactly increase my respect for the creatures.

The first time I "saw the pack train go by" was somewhere near Agnew Pass, from a point a short distance below the trail. I was listening to the sound of cascades, coming, seemingly, from the regions of Banner and Ritter, when I heard a sound which obviously was not of fellow hikers. I looked up — and there came the pack train! As the first string went by I saw, not stubborn dispositions, but fine, patient, obedient animals doing their work well. One by one, other strings went by, smoothly, efficiently, and quietly, except for certain little sounds which come from a pack train in motion — hoofs on the trail, rubbing of leather and canvas, and occasional small rattles and jingles from the packs. Not one of the mules was misbehaving, although, we had been told, there was a bronco in almost every string getting his education in packing. One of the packers was half-singing, half-talking, apparently to the animals, as he rode along the trail.

Mules in the Sierra Club pack trains! Mules led by skillful packers, going by on the trails, picking their way carefully over rocky places, toiling up and down steep slopes, filing in long lines over great snowfields, fording rushing streams, getting sleeping bags and equipment in camp on time, and staring in frank wonder and curiosity at these unfamiliar creatures that they pass on the trails — these high-trippers!

What about log-walking? An experienced high-tripper assured me that fears of such things were groundless, so I decided that one should trust Providence to provide courage, a level head, and nice, large, rough logs.

As someone remarked, once up in the Sierra, there was the almost daily excitement of finding ourselves on the wrong side of a roaring river. Fresh from frozen lakes and snowfields came these rivers and

streams of pure, icy water, plunging over cliffs, leaping over rocks and boulders, throwing water-diamonds into the sunshine and catching them, slithering over smooth granite slopes, rushing fearlessly down wild gorges, free, joyful, enthusiastic — yet, they must be crossed! But Providence did not fail us! Days with mountain peaks, forests, flowers, and good mountaineers, and nights with stars, campfires, and tall pines, soon bring courage and level heads.

The question of how to use the courage and level heads in getting on the right side of the roaring rivers was answered in a very practical way by the "engineers." Every moving-day these courageous mountaineers were up and off for new camp-sites with their axes, saws, and ropes, often before some of us even had our dunnage bags down to be weighed. Vigorously they chopped, and sawed, and climbed, and waded, and roped! Sometimes we would reach the roaring stream in time to thrill to the excitement of tree-felling, shouts of "timber," and rope-stretching, and be among the first to step over the aromatic, freshly-cut end of the log and try out the new bridge. But usually when we reached it we would simply find a taut guide-rope stretched just the right distance above a substantial log. For more dangerous crossings, or on slippery or less substantial logs, we would find the unexpected luxury of *two* guide-ropes! With courage, and a level head between two guide-ropes, who could stray far from the log-path?

"Dick and Oliver work so hard." Such an observation would have been fitting any time during the outing. It just happened to be entered in my notebook after the rainy day at Sally Keyes Lake and the hike to Hutchinson Meadows on the following day. All afternoon at Sally Keyes Lake, Oliver Kehrlein kept big campfires burning in spite of repeated downpours of rain which would turn the roaring fires into piles of charred, black logs. But not for long, for Oliver would start in again and soon have a brighter fire than the previous one. And yet, on such occasions, if you happened to say something about all the hard work and the difficulties, Oliver would say, as he did when the "engineers" were working on the Fish Creek crossing and he would be seen first on one side of the stream, then on the other, up in the top of a tree, then down in the water, "Work? That's not hard work! It's just a lot of fun. We get a kick out of it!"

The following day I happened to be among those who were following close behind Doris and Dick Leonard. At one point the trail

ran parallel to Piute Creek at the base of a steep rock-slope which was almost a perpendicular cliff in places. The water was so high that it not only went roaring down the regular channel, but rushing over the trail as well. Apparently it didn't take Dick long to decide what to do. The "engineers" climbed up the slope. After some time someone shouted, "Everyone stay out of the way. They're going to roll rocks down." Soon rocks of all sizes, loosened by the efforts of the "engineers," went hurtling down the slope, over the edge of the cliff and into the stream. Dick was below, indicating by shouts and arm movements where the rocks were needed. Then, after the rock-heaving was over, Dick himself was seen, in water almost to his knees, putting the big stones in place to form the new trail. After the work was finished he sat down on a rock and, with perfect unconcern, took off his boots and socks, poured the water out of the boots, wrung the water out of the socks, put them all back on, picked up his knapsack, and started off up the trail. Just a mere incident, apparently, just another outing problem solved, just one more river crossed!

Like most city-dwellers, I had usually thought of bathing in terms of tiled bathrooms, tubs, showers, and running hot-water. Up in the High Sierra it must be thought of in terms of streams of melted snow. The dips in the icy water were a shock to citified senses. These shocks had an awakening effect. I awakened to a new appreciation of the glorious environment — pure, sparkling water, bright, warm sunshine, graceful trees, grass and flowers, little green velvety meadows, smooth, clean rock, jagged snow-streaked mountain-peaks against the deep, blue sky — and the feeling that we all belong in this pure, natural, peaceful atmosphere. I didn't find out how all the others reacted mentally to this breath-taking experience, but from little comments which I heard here and there I should say that, while most of them enjoyed it, there were some who awakened merely to a profound and everlasting gratitude for modern conveniences.

"Remember that you are never lost until you say you are lost." A strong, clear, resonant voice rings out on the cold night air, distinct above the roar of the wildest mountain streams, thrilling the high-trippers gathered around the campfire. "Study your maps. Know where you are and how you got there — where you are going and how to get there! Stop and think — never wander! If you get



off the trail, or on the wrong trail and cannot find the right one, take care of yourself and make it easy for the brave mountaineers who will try to find you!" It is the voice of Dick Leonard, outing manager, telling of expeditions and experiences, giving instructions for moving-days, and guiding high-trippers in the way of safe, intelligent, scientific mountaineering.

Over a high mountain-pass with the Sierra Club! Eagerly I listened to discussions by experienced mountaineers about boots, soles, calks, nails, and socks! Eagerly I oiled and greased, anticipating those high points of the trip — the snow-covered passes!

I thought the nights were cold enough at Agnew Meadow, but apparently the managers didn't think so, for those prolific makers of itineraries decided to go up a thousand or so feet and camp near Agnew Pass. Up we went until we came to high points overlooking an enormous canyon and two dark majestic peaks in a setting of snow-streaked mountains.

"Banner and Ritter!" exclaimed old-timers.

Ah! Banner and Ritter! There they were, all right; as rugged, powerful, authoritative and impressive, even awe-inspiring, as you would expect mountain patriarchs of a by-gone age to be.

We came out on more high points, and there were Banner and Ritter. We camped on a high place, and there were Banner and Ritter. Every time we climbed a ridge, there were Banner and Ritter! But I started out to tell about going over Agnew Pass with the Sierra Club and only came out on a high point and saw Banner and Ritter. Well, that is just exactly what happened. I never *did* see Agnew Pass, and don't know yet where it is, exactly, but I *know* it's up there somewhere, because it's on the map and they said we went over it and camped near it.

Silver Pass was different. I remember crawling out of a warm sleeping-bag about 4 A.M. and dressing and packing in the dim, gray dawn to get an early start. Off I went up the trail before sunrise, through forests, across streams, over snow-covered mountain-slopes. After what seemed to me like a mere early morning stroll, I came upon some of my companions sprawled comfortably on some rocks. "This is it," said Oliver. "This is what?" I asked. "Silver Pass," he replied. "How *can* it be," I gasped. "It's only nine o'clock!" I had expected to be going up for hours.

You could see it was a pass all right — jagged peaks and rock



spires on either side, snowfields sloping down behind and before, and great congregations of notable mountain peaks in the distance, north and south.

What a place! What a rare combination of exquisite mountain-snow beauty, springtime freshness, and warm, bright sunshine. No wind, no rushing water, no motion; it was not wildness or desolation. It was only a wonderful shining stillness, which was more than the mere absence of familiar mountain sounds — a feeling of being up at the sources of things, perhaps a little above them. Many hours, even days, could have been spent there, but, with "miles to go," I was soon following the tracks of other high-trippers down over the snowfields.

Selden Pass was easily recognizable, for it was marked with one of those neat, modest, significant little signs which send a little thrill up the spine, for they assure you that this is the "top" and the "way through"; make you think of all the good mountaineers who have gone this way, and remind you of a wonderful Forest and Park Service. It was fun to sit up among the wild rocks, eat snow sherbet and watch the dark, threatening clouds pile up; then go down from the pass in the rain and still feel as safe and secure — perhaps safer — than one does sometimes in a warm, dry house in town. That's just one of the results of going around the mountains for a few weeks with the Sierra Club.

Going over Pine Creek Pass was the thrilling climax of a glorious month. Though it meant the last breakfast, the last moving-day, farewell to the High Sierra, and goodbye to high-trippers, nothing could take away the conviction that these bright Sierra days were very real and were to be taken home, not left up here as mere dreams and memories. Confidently, we swung along up the trail and over the snowfields to the last high point. Confidently, we went about the business of what we had come to know as the "pause on the pass" — greeting high-trippers who already there, throwing knapsacks down on the rocks, strolling over to read the sign which gives the name of the pass and the elevation (for although you already know this, there is a satisfaction in reading it on the sign), making jam-snow sherbet, discussing the merits of strawberry, blackberry, and apricot with fresh lemon, for such purposes, and in general, absorbing the wonderful stillness and the feeling of the pass.

Then, buoyantly, we picked up our knapsacks and started going

down to stay down (for a while at least); down through a veritable summary of Sierra beauties — streams, lakes, rock gardens; down the wild, broad colorful canyon, through an unsurpassed display of Sierra juniper, scattered as if to allow room for the individuality of each tree; down through the last cool aspen-groves and across the last stream; down to the end of the trail — and the cars!

Only a few hours after sitting up at Pine Creek Pass, surrounded by snow, we were out in the burning desert at Bishop. How strange the concrete walks felt under hob-nailed boots! How pale the faces of the town-dwellers looked! How delicious the ice cream tasted! And what were these tiny creatures? O yes, babies and children!

Soon we headed for the Sierra Nevada again, this time to cross over as mere motorists; to go skimming along past streams, flowers, meadows and pines — and *hundreds* of marvelous bed-sites!

## A WEST SIDE PACKER ON THE HIGH TRIP

BY NORMAN (IKE) LIVERMORE



EVERY packer in the mountains has heard of Allie Robinson and his outfit, but comparatively few have been with him on the Club trip. He has applications from all sorts of packers — real and imagined — good, bad, and indifferent. But Allie for the most part takes only Owens Valley packers, and there isn't much yearly turnover. I therefore considered myself mighty lucky to be assigned one of the 13 strings of mules used on the '38 trip, and I found that realization did not fall short of anticipation. Most club members really don't get much of an idea of a High Trip packer's life, habits, or viewpoint, so I thought a brief article on such things might be of interest.

First of all, Hightrippers don't see anything at all of the preparations at Independence or the deadheading to the point where the Club is first met. To the packers, these are in many ways the highlights of the trip. This was particularly true for me, a so-called "West Side" packer whose largest previous trip had involved the use of only thirty head of stock.

When I arrived at Independence, I found Allie's corrals a very busy place indeed. Packers were arriving from various points in the Valley. Most of them, with a goodly sprinkling of Independence corral-fence sitters, were watching Allie at work in the corrals. Here, with two or three helpers, he was selecting out of more than 150 head the horses and mules that were to go on the Club trip. This is no easy job, and only a person with a lifelong experience of handling and knowing stock is qualified to do it properly.

The stock was pretty well shod up, because Pete Buckley had been on hand for several weeks to tend to this exceedingly tough job. And if you don't think I mean tough, just try and shoe a bronc mule some time. This year, there were ten of them on the High Trip. Allie says he wishes Luther Burbank had been a stock breeder. He might have been able to develop a strain of mules that are born with their shoes on!

With the stock pretty well selected, Allie gave each of us our packing equipment which consisted of pack saddles with rigging,

pack blankets, snap ropes, a bell and a blind. Packers furnish their own saddle and equipment, including a bedroll (weight not over 75 pounds!).

Our start from Independence was in the cool of dawn, but the rest of the day was plenty hot! Older packers informed me that our four-day deadhead up the Valley was cooler than usual. I didn't say anything, but as I sweltered in the heat, I wished more than once that I was back in Marin County. At midday the heat was terrific.

We never had any lunch, but we made up for this at breakfast and dinner. No one seemed to know or care who the cook was going to be until after the fire was started. There was no grate, and no equipment except frypan, coffeepot and stewpot. Dishwashing was a hasty if not painstaking chore, and the drying was mostly done by air (circulating naturally over a used mule pack cover). But everyone got happily and healthily nourished, which after all is the main thing. In the evening we'd sit around the campfire awhile where the favorite occupation was to "run mustangs," i. e., to lay dreamy plans for capturing wild Nevada horses. This didn't last far into the night, though, because the regular rising hour was four.

The packers always look forward with keen anticipation to meeting the Club, and this year was no exception. After our first mingling with the crowds at Agnew Meadow, many were the quips and comments about the various Club members, freshmen and regular.

Hightrippers' opinions of packers seem to range all the way from disdain through indifference up to admiration. Packers, on the other hand, have a rather uniform and understandable if not quite fair opinion of the Club members whose fine love of the Sierra makes the High Trip possible. It might be described as a feeling of good natured sympathy which is perhaps best expressed by the term "footburner." Packers, born and raised with stock, never have been able to see how people could derive pleasure from hiking. Without analyzing their opinion much, they feel genuinely sorry for what they regard as misguided souls burning their feet up. And when it comes to rock climbing, of course, a packer definitely loses all sympathy and comprehension. The whole subject is completely beyond him, and its devotees are living examples of life's endless mystery.

The first two weeks of this High Trip were unique for packers because we had literally to live by ourselves, at camps as much as

several miles distant from the main Club camp. Francis Farquhar tells the famous story of the George Eastman pack trip where the packers were not allowed to eat with or near the packtrippers. As a result, they set up their own camp, pretended they had lost their stock, and proceeded to play poker for a week. We weren't that bad, but we did have our own camp and had a lot of fun doing it. We were glad at the end of the first two weeks to mingle with our "foot-burning" friends at meals and campfires, but we had a pretty good time by ourselves those first two weeks. Here is our grub list, made out by Allie; how does it sound to you? I can assure you it is just the fare that packers thrive on:

## GRUB LIST — 16 MEN — 10 DAYS

1 hind quarter beef	1 case eggs
10 lbs. cand. butter	25 lbs. dry beans, pink
1 sack potatoes	10 cents garlic
12 large cans corn	5 lbs. dry peaches
12 large cans pork & beans	5 lbs. dry apricots
6 1-lb. cans coffee	12 large spaghetti
24 cans milk	1 shaker salt
2 rolls of jack cheese	5 lbs. Crisco
12 large cans tomatoes	10 lbs. rice
2 hams	5 large cans sauerkraut
2 beacons	5 large cans hominy
12 No. 10 cans peaches & pears	1 large can Tea Garden syrup
25 lb. sack flour	1 pkg. tea bags, black
2 med. size cans baking powder	5 pkg. Beeman's gum
50 cents onions, dry	10 lbs. Christmas candy, hard
1 pkg. Arm & Hammer soda	

And as for campfires, it would take a book to recount all the tall tales told there, but here are a few that apply particularly to High Trip packing.

One-eye Fox: A nighthawk of this name was a good hand, but he didn't like to get up in the morning. Often he would unroll his bedding in a conspicuous place in mid-afternoon, only to remove it to some remote spot after dark, so that Allie couldn't find him early in the morning. Once he even hid his bed under a mass of packsaddles and equipment and slept soundly until breakfast while others had to do the early morning wrangling. But finally his evil deeds caught up with him. In the middle of a cold night at a high camp, Allie chanced to wake up and saw Fox crouching gloomily

over the remnants of the evening's campfire. When questioned, he replied dolefully, "I done hid my bed and now I can't find it." After this episode, Fox was the laugh of the camp, and he didn't try bed-hiding again.

**Dan Taché:** The stories about this famous High Trip cook are legion. Many of them center about the weight and contents of his bedroll. They are doubtless exaggerated, and will become increasingly so in the years to come, but like all such stories, there was an original foundation of truth. At any rate, a half dozen present High Trip packers will swear to the following: It seems that Dan's bedroll was famed for being very heavy and bulky. This condition went on from year to year until finally the commissary packer who loaded heavy stoves with ease could scarcely lift the cook's bedroll. One day when Dan happened to leave camp early, therefore, the bedroll was weighed, and its contents examined. The weight was reported to be well over 100 pounds, and the contents as varied as a mule's moods. Most important item of foreign matter, however, was thirty pounds of assorted hambones!

**Air Mattresses:** A certain packer had been given an air mattress by an admiring packtripper. After endless blowing, he finally succeeded in inflating his new-fangled creation, and trudged off happily to dinner. When he had left, Allie tarried and let all the air out. After two nights' sleep, the packer didn't notice that the bag was deflated, but he remarked to Allie that he'd be damned if he could notice that the mattress made any difference at all in his sleeping.

**Snow Sherbet:** On the '36 trip, one of the old time packers was noted for his voracious and everlasting appetite. Along the trail one day some one gave him a can of jam. This he proceeded to mix with snow in the approved manner until he had succeeded in consuming all of it. Not long thereafter, he became sick as a dog, and was in great distress for better than a day. When he recovered enough to voice his sentiments, his only remark was, "They ought to have known when they gave it to me that a whole can of jam would make me sick."

Such is the life of a packer. As the years roll by, packers will come and go. But I hope that the High Trip and Sierra packing will go on forever.

## THE RECORD OF AN AVALANCHE

BY JOEL H. HILDEBRAND

AN understanding of the behavior of avalanches has become not only a matter of inherent interest but one of self-preservation to the large numbers who are learning to go about in the Sierra Nevada during winter and early spring. The infrequency of avalanches in these mountains as compared to the Alps, where they kill numbers every year, may easily lead us to ignore their lethal possibilities and spoil our good record for safety in winter touring. I believe it worth while, therefore, to reconstruct the story of a large avalanche from evidence observed near the camp of the High Trip on Shadow Creek early in July.

The avalanche started in or near the chimney on the north side of the main peak of Volcanic Ridge at an elevation of something over 11,000 feet. It descended over 2000 feet to Shadow Creek, crossing a meadow nearly a third of a mile and ascending about 100 feet on the opposite side of the meadow. Its course is traced in the accompanying photograph. Figure 1 shows particularly the beginning of the avalanche. The scars left by the removal of so much snow and the subsequent melting of the underlying snow are clearly visible in the neighborhood of *a* and *b*. It then descended in two main streams, the one going more westerly down the slope labeled *d*, crossing Shadow Creek and carrying away a number of trees of large diameter, the other descending approximately where shown by *c* in Figure 2, sweeping across the meadow in the foreground and up the opposite side, carrying with it trees of 30 to 40 feet in length.

Now there are two types of avalanche, one called appropriately in German a "ground avalanche," which occurs when the entire deposit of snow becomes somewhat slushy and flows. The other is known as a "powder snow avalanche" and usually occurs when there is a heavy fall of light powder-dry snow upon a smooth surface of previously fallen snow which has become well packed, the latest snowfall not having had an opportunity to bind itself to the previous fall. The evidence indicates very clearly that the avalanche under discussion was of the latter type. In the first place, it evidently

started at a high altitude where the normally lower temperature would prevent extensive melting. More conclusive, however, is the fact that on the slopes, particularly *c* and *d* in Figure 2, are many stumps of trees broken off at about six feet above the ground, while small trees of about this height or less were not injured. I have a photograph taken near the end of the avalanche on the north side of the meadow, showing a large tree which had been carried from a distance and beside it a tree about five feet high totally uninjured by the avalanche.

For the sake of drawing our moral, we may note, first, the evidence of tremendous momentum in carrying the broken trees so far across a level meadow and piling them up on the opposite side. It is evident that a skier caught in such a torrent of wind, snow, and trees would have been in a very precarious position. We may note, also, that the avalanche evidently began a long distance from the lower slope. Skiers on the lower portion of the slope might have decided that their position was relatively safe, due to the condition of the snow immediately around them. It would have been highly important, therefore, to have taken into consideration the condition of the snow 2000 feet above them. Furthermore, a skier passing along the north side of the flat in the foreground of Figure 2 might have decided that he was altogether safe from danger of avalanche. However, this would not have been the case, and the tremendous velocity with which the avalanche doubtless descended would have made it very difficult for him to escape from its path before being overwhelmed. The *Sierra Club Bulletin* is ordinarily no place for moralizing, but I believe that this is appropriate in the present instance and will, I hope, be received by skiers with due seriousness.



PLATE II.

SIEBERA CLUB BULLETIN, VOL. XXIV.



RITTER AND BANNER  
By Cedric Wright



A JULY AFTERNOON IN THE HIGH SIERRA

By Cedric Wright



ICE-FILM AND SHORE LINE

By Cedric Wright



BANNER PEAK ACROSS THOUSAND ISLAND LAKE  
JULY 1938

By Cedric Wright



LOOKING ACROSS UPPER ICEBERG LAKE TO RIEGELHUTH MINARET

By Doris F. Leonard



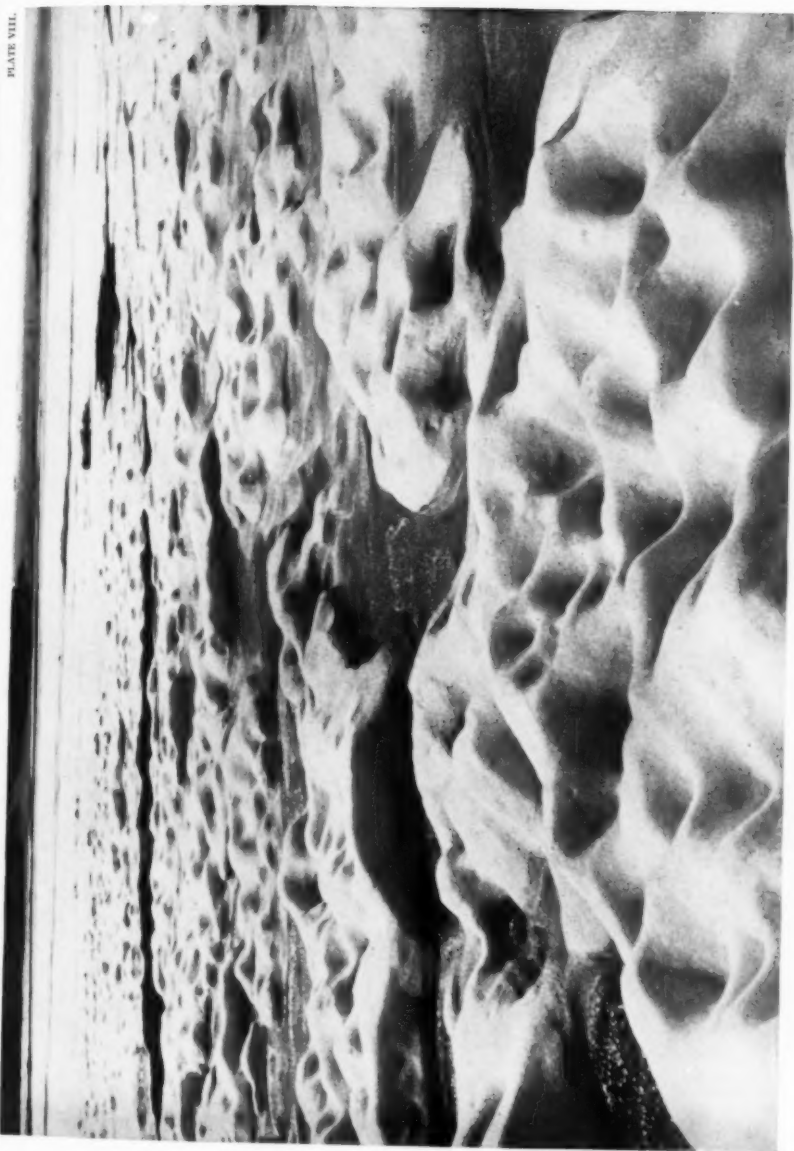
SERVING TEA AT GARNET LAKE  
By Cedric Wright

SERVING TEA AT GARNET LAKE

By Cedric Wright

SIERRA CLUB BULLETIN, VOL. XXIV.

PLATE VIII.



JULY 1938

By Charles S. Webber



Figure 1

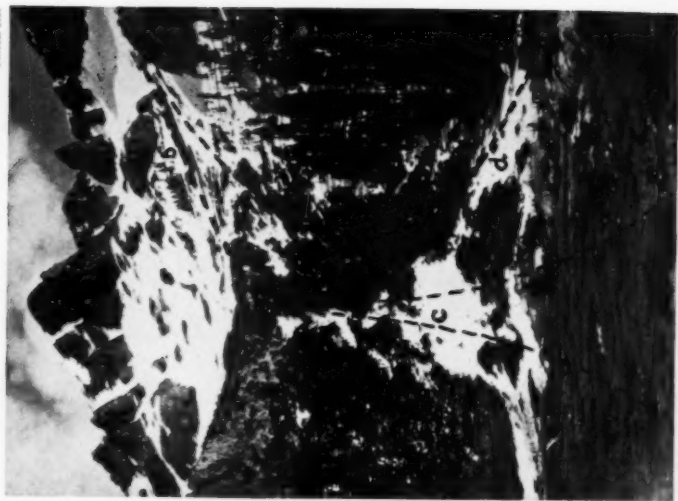


Figure 2

THE PATH OF AN AVALANCHE, SHADOW CREEK

By Joel H. Hildebrand



Figure 1

THE PATH OF AN AVALANCHE, SHADOW CREEK

By Joel H. Hildebrand

SIERRA CLUB BULLETIN, VOL. XXIV.



PLATE X.

RITTER AND BANNER FROM SHADOW LAKE

By Cedric Wright

SIERRA CLUB BULLETIN, VOL. XXIV.

PLATE XL



ENJOYMENT AT SHADOW LAKE  
By Cedric Wright



DEVILS POSTPILE — CURVED FORMATION

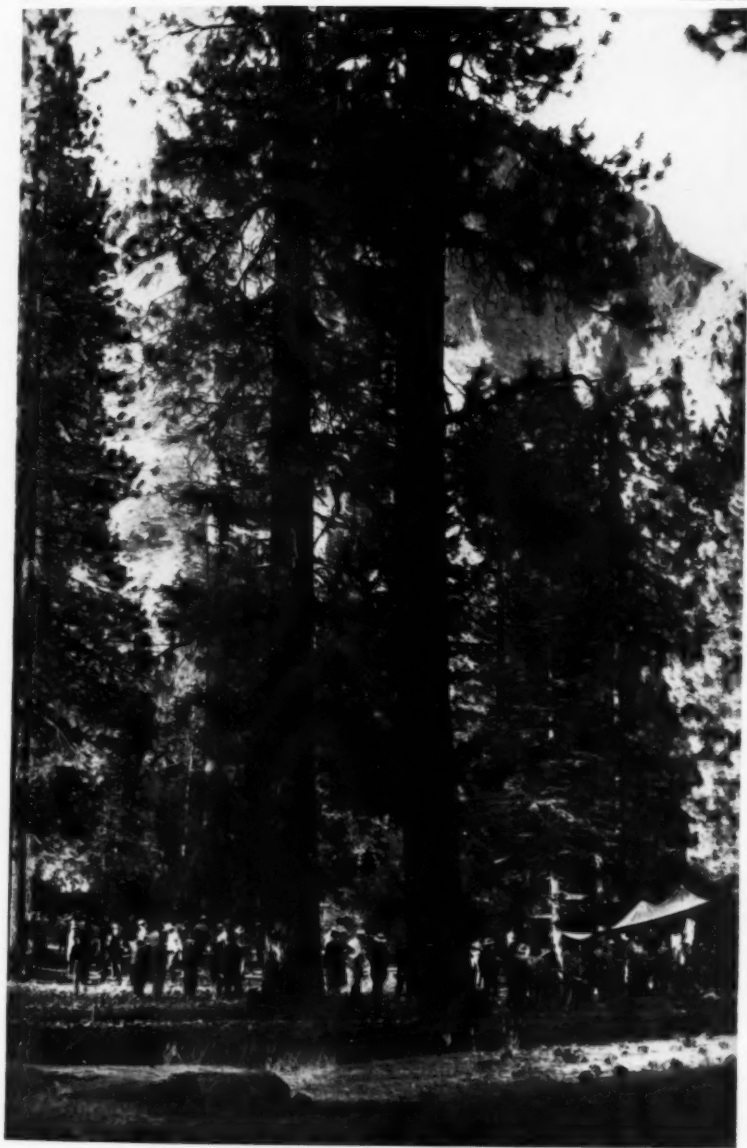
By Cedric Wright

SIERRA CLUB BULLETIN, VOL. XXIV.

PLATE VIII.



FREIGHTING ACROSS FISH CREEK  
By Charles W. Mors



SIERRA CLUB CAMP AT FISH VALLEY

By Herbert P. Rankin



CASSIOPE

By Charles S. Webber



CHEF MARTIN PRODUCES PANCAKES

By Herbert P. Rankin

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PLATE XVII.



RAINY DAY  
By Cedric Wright

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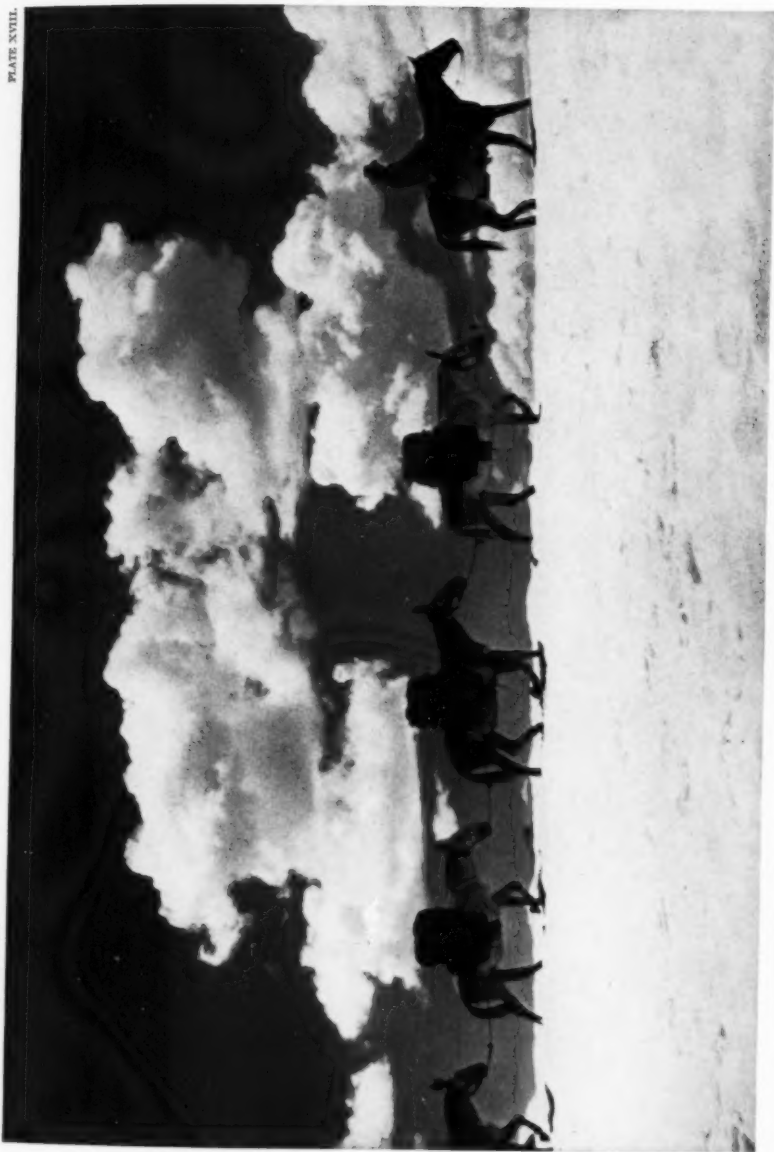
PLATE XVIII.



RAINY DAY  
By Cedric Wright

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PLATE XXIII.



CROSSING THE PASS  
By Charles S. Webber



NORTH FROM SILVER PASS  
RITTER AND BANNER IN THE DISTANCE  
By Cedric Wright

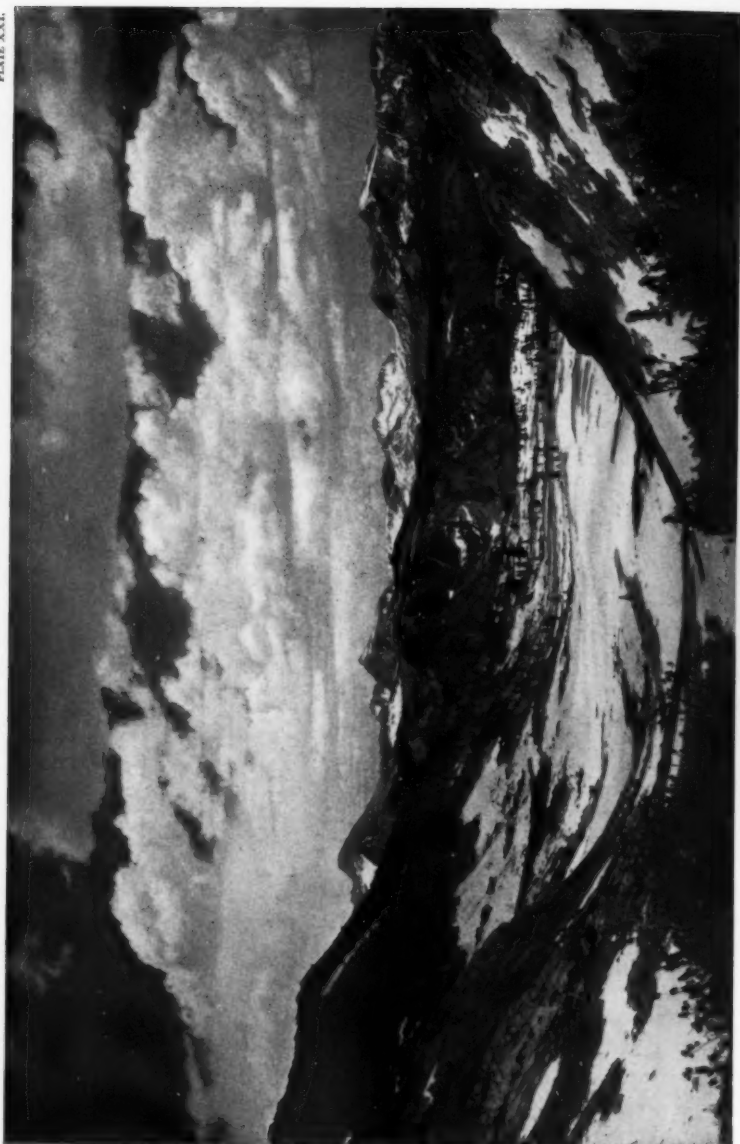
NORTH FROM SILVER PASS  
RITTER AND BANNER IN THE DISTANCE  
By Cedric Wright

SIERRA CLUB BULLETIN, VOL. XXIV.

PLATE XX.



SILVER PASS  
By Charles W. Mors



Selden Pass

Seven Gables

SOUTH FROM SILVER PASS

By Herbert P. Bankin

Selden Pass

Seven Gables  
SOUTH FROM SILVER PASS  
By Herbert P. Rankin



A RAINY AFTERNOON IN CAMP

By Herbert P. Rankin



THIRTY-FIVE POUNDS?  
By Charles S. Webber

THIRTY-FIVE POUNDS?

By Charles S. Webber

SIERRA CLUB BULLETIN, VOL. XXIV.

PLATE XXIV.



Allie Robinson

Ike Livemore

A PACKERS CONFERENCE

By Charles S. Webber

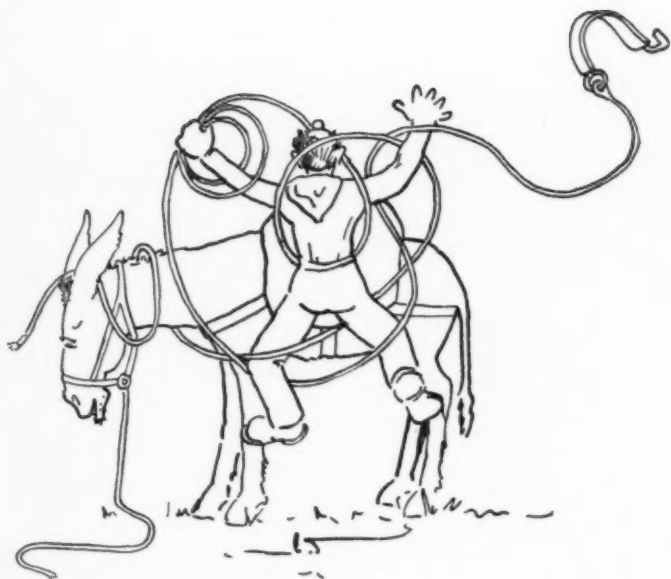
SIERRA CLUB BULLETIN, VOL. XXIV.

PLATE XXV.



CANYON RIM  
By Cedric Wright





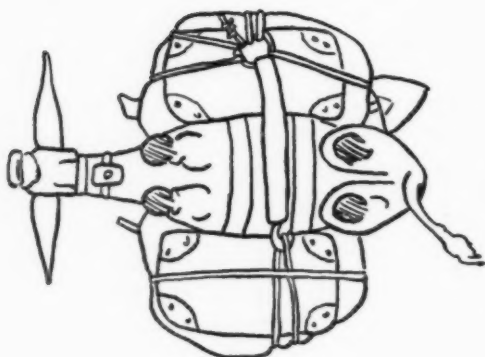
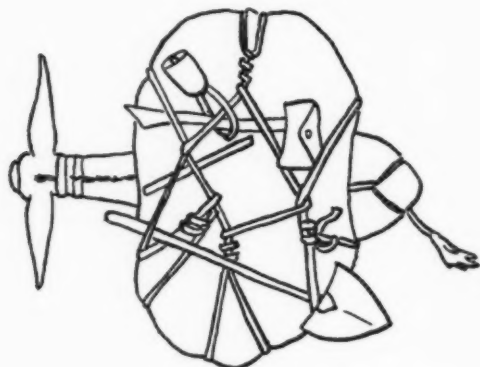
## THE 1938 BURRO TRIPS — A SUCCESSFUL EXPERIMENT

BY BRAEME E. GIGAS

*Illustrated by Milton Hildebrand*

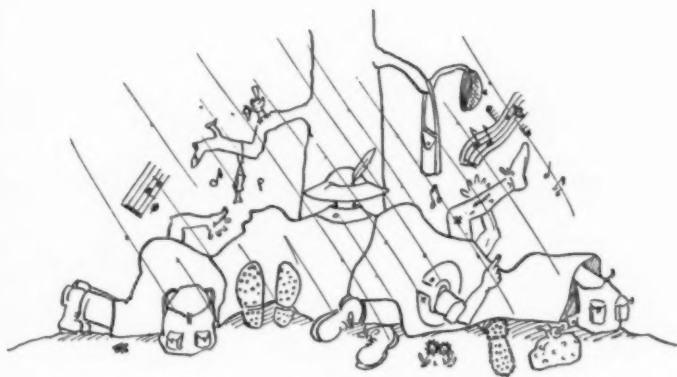
AN organization, to justify its existence, must show progress in the conduct of its affairs. As the membership roll increases, so must activities increase in their nature and scope. The Sierra Club, no exception to these well-known rules, is, fortunately, guided by a most efficient and far-sighted group of officers, who have recognized that, in addition to the annual summer outings, other means of acquainting members with the beauties of the Sierra Nevada should be planned. The summer outings, scheduled since the early days of the club, have of necessity been enjoyed by comparatively few, as the number that can be comfortably accommodated is limited by numerous factors. To take care of the increasing number of members who enjoy high mountain scenery, but who have

only a limited time at their disposal, or who prefer to indulge their desires at a lower cost, even though it entails personal attention to the necessary camp chores, President Hildebrand and Chairman



Leonard conceived the idea of "burro trips." It was the plan to send groups of not more than twenty persons, with one animal for every two persons, into the mountains for periods of two weeks each. During this time the party would be on the move practically every

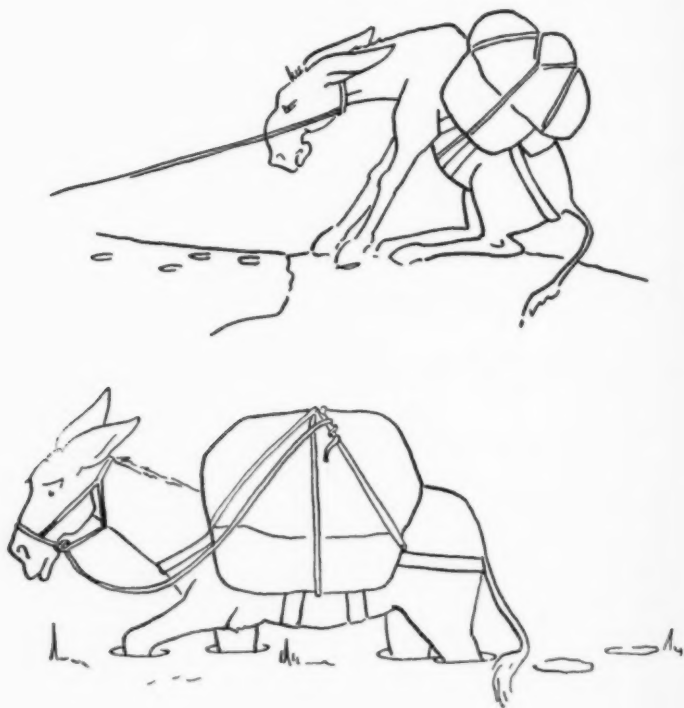
day, using the burros to transport dunnage bags, provisions, and camp equipment. All the work of packing and unpacking, establishing camp, cutting firewood, cooking meals, caring for the animals, locating feed for them, and finding them in the morning would be done by the members themselves. It was contemplated that the leader, in addition to being an individual familiar with



the country to be traversed, should daily illustrate by lecture and example such additional matters as should be known to every good woodsman, such as the rudiments of first aid for man and beast, use of the compass and topographic maps, identification of trees of the forest, identification of plants harmful to stock, location and proper use of the most efficient fire-making materials, how to ford streams and to cross snow-banked passes, how to extricate burros from bogs, relative merits of various knots, use of reflector ovens and aluminum grates, how to plan, from the standpoint of weight to be carried, both burro- and knapsack-trips, what to carry in the way of quick-energy foods, how to glissade on snow banks, the etiquette of climbing mountains and the order of registering names on the peaks thereof.

It was felt that the venture would be strictly in the nature of an experiment and that perhaps fifteen or twenty members of the club could be induced, by suitable publicity beforehand, to enter upon such an undertaking. But, when plans and the cost of the trip were

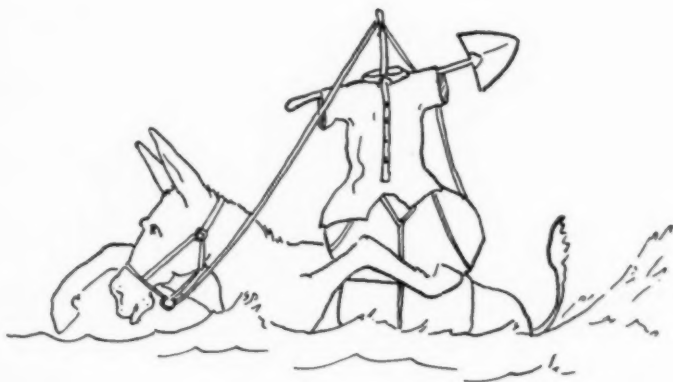
announced, far more than that number signified their intention of joining, so that it was found necessary to schedule two outings, one during the last two weeks of July, the other during the first two weeks of August.



Milton Hildebrand, with wide experience in the mountains, both in summer and winter, was the happy choice of the committee to serve as leader. Both groups were scheduled to start from and return to Big Meadow, four miles from the Generals Highway between Sequoia and General Grant national parks, but upon arrival it was learned that a truck trail had recently been constructed east of that point along Horse Corral Creek. The actual starting

point, therefore, was a wooded knoll, delightfully situated near Horse Corral Meadow, at an elevation of 7500 feet.

The first group of seventeen arrived on July 16, and after a day spent in camp receiving instructions along general lines, including the making of that refreshing hot-weather drink, synthetic lemonade, a start was made on July 18 for a circle tour of the canyons and



ridges in the very heart of the Sierra — Roaring River, Cloud Canyon, Colby Pass, Bighorn Plateau, Bubbs Creek, and the South Fork of the Kings River. Heavy rainfall and the presence of deep snow-banks soon forced a change in the itinerary, and after enjoying camps at Williams Meadow and Scaffold Meadow, it was found impossible to cross Colby Pass. Additional camps were then established in Cloud Canyon and at Table Creek, and cross-country trips taken in various directions. On the return, the same route was taken as on the out trail. Saturday, July 30, saw the last of the first party homeward bound, bronzed by exposure, hardened by miles on the trail, equipped with an augmented vocabulary and enriched by the knowledge of having successfully completed a self-appointed task.

On July 31 the second group arrived. After a day or two in camp along Horse Corral Creek, which, with the advent of warm, sultry weather and the consequent use of its refreshing waters, externally, soon became known as Horse Corral Spa, the party crossed Summit

Meadow and switchbacked down into Kings River Canyon at Cedar Grove. Traveling up stream, the cavalcade followed the South Fork to its junction with Woods Creek, turned east, and reached the lower Rae Lake by way of the south fork of Woods Creek. Two days were spent at this delightful spot. On the morning of the day that would see the party crossing Glen Pass for a camp at Bullfrog Lake, it

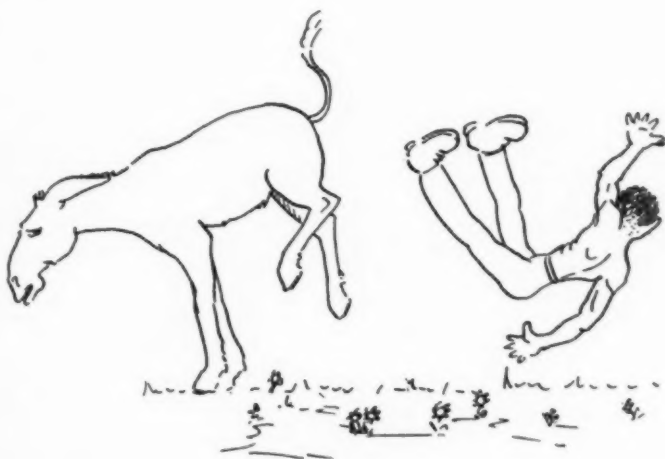


was found that instead of twelve burros there were thirteen — Rae, a jenny, having arrived unannounced during the night. This event, unparalleled in the lore of pack-train management, and as Milton stated, one which served to explode the grass-belly myth, was the cause of some delay in starting and of the decision to complete the trip with eleven animals, leaving the mother and baby in the care of nearby campers.

After two days at Bullfrog Lake, one day of which was used by a number of the party in climbing University Peak, the return trip to Horse Corral Creek was made by way of Bubbs Creek, the unforgettable Sphinx Creek switchbacks, and Moraine, Scaffold, Sugarloaf, Williams, and Rowell meadows.

It will probably be of interest to recount the happenings of an ordinary day. Two persons were assigned to each animal. This meant catching it in the morning and the vigorous application of the currycomb. In packing, the diamond hitch was used almost ex-

clusively. At least one person, but often both, depending on the characteristics of the animal, marched alongside during the day. When a stop was made for lunch, the packs were dropped, but the burros were not allowed to graze freely. Upon arrival in camp, the animals were unpacked, three or four out of the lot were belled, and all were permitted to range wherever grass could be found.

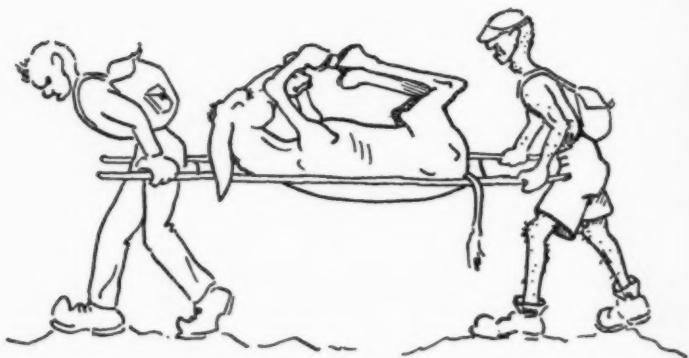


The party was divided into fours for the handling of the commissary duties. The first four, for example, would arise, start fires, prepare breakfast, and lay out the lunch materials. Washing of the breakfast "dishes" was done by the second group of four. Those not serving on either of these squads assisted in catching and packing the animals. Camp was usually broken and the party on its way by eight-thirty o'clock in the morning. Late in the afternoon, the dish washing crew of the morning would hasten ahead with the leader and select and pitch camp and prepare dinner. The third group of four acted as the clean-up squad. Campfire lectures by the leader, followed by group singing, completed the day. This schedule was followed except on occasions when more than one day would be spent at a particular camp. This extra day would be used

in various ways — swimming, fishing, loafing, and the organization of climbing parties.

While the campfire lectures were not obligatory, they were found to be of great interest and were always fully attended. Members soon became proficient in the various aspects of comfortable camping, arriving at this stage as a result of these lectures and demonstrations and the repeated opportunities afforded by the days' marches of putting into practice and testing under actual conditions the points explained around the camp circle.

In accordance with the practice of all wise leaders, Milton remained much in the background, allowing each member of the party to work out his problems and difficulties encountered during the day. One learned by trial and error, and it speaks well for the per-

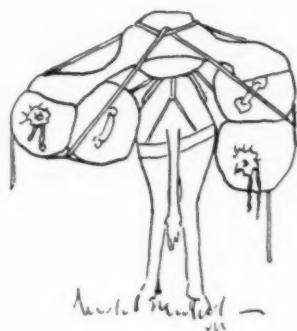


sonnel of both parties that few mistakes were made, and those no more serious than the use of salt instead of sugar in the cocoa and the addition of lemon extract to the applesauce by the spoonful rather than by the drop.

The members of both trips, thrown thus upon their own resources and allowed to meet and overcome their difficulties, returned home with a definite feeling of having substantially added to their mountaineering knowledge, and of having at the same time enjoyed a memorably happy vacation. More than this, however, they knew at the end of each day, as well as at the end of the trip, that something



more important was resulting from their activities — the realization that the softening influences of a modern, metropolitan existence had not dulled man's spirit of adaptability in the face of hard drenching rains, long, dusty miles on the trail, heartbreaking talus slopes, insecure footing for the animals across snow-banks, wet firewood, alarmingly deep fords, and the other hundred and one trials, tribulations, and triumphs of a Sierra Club Burro Trip.



## A CLIMBER'S GUIDE TO THE HIGH SIERRA

### PART III

INTRODUCTION BY THE COMMITTEE ON MOUNTAIN RECORDS

ARTHUR H. BLAKE, *Chairman*



AS explained in the original introduction to Part I of this Guide, the Sierra Club Committee on Mountain Records and Place Names has for several years been compiling data for a High Sierra climbing guide. A great deal of information has been gathered, but much remains to be done before the work can be considered ready for publication in final form. Meanwhile, it has seemed desirable to place certain well advanced portions before members of the Club for current use. The Sawtooth Ridge and the Ritter Range have been covered in previous issues of the *Bulletin*.<sup>\*</sup> The Committee on Mountain Records is particularly anxious that all of these advance portions should bring forth additional information, as well as criticism, and that all data should be carefully examined by those who have a special knowledge of the regions, and especially of the peaks. Full details of the descriptions of climbing routes are lacking in many instances because field notes were inadequate. It is hoped that those following the routes will fill in the missing portions. In other instances routes are described in considerable detail, but the climber should not therefore conclude that no variations are possible.

There remains in the High Sierra a practically inexhaustible field for the discovery of new routes and for the exploration of pinnacles, arêtes, and cliffs. It is the desire of the Committee to gather in the Club files full descriptions of all new climbs for the benefit of what it is hoped will be successive editions of the "Climber's Guide."

Considerable thought has been given to the classification of standards of difficulty, in order to give each climber an opportunity to judge for himself what climbs he should undertake. It is, of course, clear that no one should attempt a climb unless properly equipped and prepared by experience to meet the safety requirements recommended. A knowledge of general mountaineering sufficient to care for one's self in the region is presumed. There have been

<sup>\*</sup> S. C. B., 1937, 22:1, pp. 48-57, and 1938, 23:2, pp. 20-32, respectively.

changes in the original classification to meet certain objections, and the revised form is as follows:

1. *Easy.* Any serviceable footgear will do. Examples: Clouds Rest, Alta Peak, Conness, Dana, Whitney.
2. *Moderate.* Proper footgear essential — nails or rubber. Examples: Banner, Clark, Lyell, Russell, Abbot.
3. *Difficult.* Ropes should be available. Examples: North Palisade, Darwin, Middle Palisade, Clyde Minaret, Half Dome from Mirror Lake.
4. *Very Difficult.* Ropes essential. Examples: Thunderbolt, Starr King, Three Teeth, North Buttress of Sill, East Face of Whitney.
5. *Severe.* Pitons should be used for safety. Examples: Panorama Cliff, Washington Column, East Buttress of Whitney, El Capitan Chimney, Cathedral Spires.
6. *Very Severe.* Pitons must be placed for direct aid. Examples: The *first* ascents of Split Pinnacle, the "First Error" of the Lost Arrow, Northwest Face of Lower Cathedral Rock, Cathedral Spires. (If the pitons now in place on these climbs were removed on the direct-aid pitches, *repeat* ascents would be sixth class.)

#### THE PALISADES

MOUNT AGASSIZ, MOUNT WINCHELL, NORTH PALISADE, MOUNT SILL,  
MIDDLE PALISADE, THE THUMB

BY HERVEY VOGE AND DAVID R. BROWER

Although there are higher peaks in the Sierra Nevada than those found in the Palisade Group, there are none of bolder or more rugged relief, or more beautifully alpine in character, than those in that spectacular section of the Sierra Crest which divides the watersheds of the Middle Fork of the Kings and the two branches of Big Pine Creek. The climax of this divide stands 6000 feet above Le Conte Canyon and the Kings River to the west, and nearly two vertical miles above the desert environs of the little town of Big Pine, eastward in Owens Valley. The Palisades form the second highest group in the Sierra. They are about 40 miles NW. of the higher

Muir Crest peaks which culminate in Mount Whitney, and about 70 miles SE. of Yosemite. North Palisade (14,254) is the third highest peak in California. Three other points of the Palisade range exceed 14,000 feet in elevation: the Northwest Peak of North Palisade (approximately 14,200), Mount Sill (approximately 14,100) and Middle Palisade (14,049). Split Mountain (14,051), formerly known as South Palisade, is actually apart from the Palisades, and is omitted from this portion of the *Guide*.

#### HISTORICAL RESUMÉ

The Palisades were named by the California State Geological Survey in 1864; the heights of North Palisade and Split Mountain were determined at over 14,000 feet in 1875 by the Wheeler Survey. Four years later the late Lil A. Winchell was in the region and named Mount Winchell, after his father's cousin, geologist Alexander Winchell, and Agassiz Needle, after naturalist Louis Agassiz. It is hardly possible that "Agassiz Needle" could have been intended for the gradual peak which bears the name on the topographic map, and, in order to correct a false impression, the name "Mount Agassiz" has been substituted. Winchell also gave the name "Dusy Peak" to North Palisade, but the name did not become established. In 1895 Professor Bolton Coit Brown renamed it "Mount Jordan"; but finally the original "North Palisade," an admirably descriptive name, was restored, and David Starr Jordan was commemorated by a peak on the Kings-Kern Divide.

Approaching the Palisades from Cartridge Creek in 1903, Joseph N. Le Conte, with James S. Hutchinson, James K. Moffitt, and Robert Pike, attempted to climb North Palisade. Stopped in their first attempt, they turned to Mount Sill, and met with success on its easier slopes. The following day, however, July 25, 1903, they discovered a route, and Le Conte, Hutchinson, and Moffitt made the first ascent of North Palisade.

Middle Palisade did not fall so soon or so easily. An unsuccessful attempt was made July 20, 1919, when H. H. Bliss, A. L. Jordan and J. M. Davies climbed a peak just south of the true summit, which they named "Peak Disappointment" upon discovering their error. A storm stopped a subsequent attempt upon the correct peak. Two years later, Francis P. Farquhar and Ansel F. Hall, unaware of the earlier attempt, repeated the mistake, but upon discovering

their error descended 2000 feet and then climbed the true summit, thus accomplishing the first ascent, on August 26, 1921.

For the pioneering of new and more difficult routes in the region principal credit must go to Norman Clyde, veteran of nearly a thousand Sierran ascents. Because of his residence in Owens Valley, it was natural that his interest in the Palisades should center upon routes from the glaciers. Several fourth class routes were established in 1931, when a party of nine, led by Robert L. M. Underhill, of the Appalachian Mountain Club, and Farquhar and Clyde, of the Sierra Club, introduced the proper use of the rope to the Sierra. In the future, routes of still greater difficulty will doubtless evolve from the application of pitoncraft. One should not conclude, however, that all the climbs of moderate difficulty have already been made.

#### TOPOGRAPHY AND ITS RELATION TO CLIMBING

Unlike most peaks in the Sierra, the Palisades have few easy approaches. The SW. walls, where one usually expects gradual slopes, are high; while the NE. sides are severely glaciated, with steep-walled amphitheatres and residual glaciers to complicate the climbing routes. The main Palisade Glacier is the largest in the Sierra. An outline map of the region is appended. For details of the topography reference is made to the *Bishop* and *Mt. Goddard* quadrangles of the United States Geological Survey map.

In 1864, members of the California State Geological Survey, seeing the Palisades at a distance, spoke of them as of volcanic origin. This was wrong, however, for the area is largely of granite, very much disintegrated along lines of cleavage, but very sound and excellent for climbing. Nevertheless, the ceaseless testing and care inevitably associated with climbing above timberline are essential. The glaciers, although contributing much to the scenic magnificence of the Palisades, do not figure largely in mountaineering except as convenient avenues of approach. Crevasses are small and do not often impede progress; furthermore, the declivities are not extreme except where ice meets rock walls. In chutes and couloirs steep ice is frequently encountered, and though it may sometimes be avoided, an ice-ax is necessary if peaks are approached from the NE. Crampons are not needed if shoes are well nailed. Snow conditions vary greatly, and the exercise of sound judgment backed by experience is prerequisite to many of the climbs.

## APPROACHES AND CAMPSITES

*From Big Pine.* The quickest approach and perhaps the most dramatic, because of the sudden transition from barren desert to alpine splendor, is from the E. From *El Camino Sierra* (U. S. 395) in Big Pine an 11-mile road extends to an elevation of 7900 feet at Glacier Lodge (accommodations, supplies, packing) and slightly above. A horse trail continues up the North Fork of Big Pine Creek and above Fourth Lake to Glacier Lodge Upper Camp (meals, accommodations) at 10,900 feet, with short laterals to many lakes, fine campsites, and the Palisade glaciers. From Glacier Lodge there is also a trail into the South Fork basin, and knapsackers will find many campsites beyond the end of the trail, up to 11,400 feet under Temple Crag, and to 11,000 feet beneath Middle Palisade.

*From Bishop.* A road follows Bishop Creek 20 miles to an elevation of 9750 feet at Parcher's Camp (accommodations, supplies, packing), from which a horse trail continues over Bishop Pass to fine campsites in Dusy Basin.

*From the Muir Trail.* The Bishop Pass lateral approaches Dusy Basin campsites. The Muir Trail passes within three miles of the peaks S. of North Palisade on the way to Mather Pass and the South Fork of Kings River. Fine campsites are to be found in Little Pete, Grouse, and Deer meadows. Palisade Basin is quite desolate, but knapsackers can camp at its lower border (11,200) and also along Glacier Creek or at 10,500 feet on Palisade Creek.

The contributors to this portion of the *Guide* have been up and down the Sierra, and have yet to find more pleasant and at the same time magnificent sites in which to set up camp than those in the Palisade country. For the energetic mountaineering spirit there are ceaseless challenges in varying seasons to find new ways up the familiar peaks. But there is no less enjoyment when the energetic spirit asks for a day off, to explore the glaciers or the ways of trout; or, if such pastimes seem too strenuous, just to review the majestic panorama from a shady heather bed while the mind, and only the mind, scales the sixth class pitches.

## REFERENCES

*Guide to the John Muir Trail and the High Sierra Region*, by Walter A. Starr, Jr., published by the Sierra Club, 1934. See pp. 80-97 for details on approaches.

*Sierra Club Bulletin*: 1904, 5:1, pp. 1-19; 1905, 5:3, p. 15; 1914, 9:3, p. 80; 1915, 9:4, p. 262; 1921, 11:2, pp. 204-205; 1922, 11:3, pp. 264-270, 271, 274, 312; 1924, 12:1, pp. 90-91; 1925, 12:2, p. 132; 1926, 12:3, pp. 221, 307; 1927, 12:4, p. 420; 1928, 13:1, pp. 33-34, 87-88; 1929, 14:1, pp. 58-60, 86-87; 1931, 16:1, pp. 105, 107, 108; 1932, 17:1, pp. 119-120, 124-125; 1934, 19:3, pp. 24-25, 94-97; 1935, 20:1, pp. 72-74; 1937, 22:1, p. 106; 1938, 23:2, pp. 33-35, 45, 104.

*American Alpine Club Journal*: 1930, 1:2, pp. 186-188; 1931, 1:3, pp. 344-347, 395-401.

#### PHOTOGRAPHS

Of the Palisades in general.—*Sierra Club Bulletin*: 1896, 1:8, p. 297 (sketch of "Mount Jordan"); 1903, 4:3, plate 68; 1904, 5:1, plates 2, 3, 4; 1913, 9:1, plate 29; 1915, 9:4, plates 102, 126; 1917, 10:2, plate 181; 1922, 11:3, plates 77, 78, 79; 1934, 19:3, plates 20, 24; 1936, 21:1, plate 12; 1938, 23:2, plate 31. *American Alpine Club Journal*: 1930, 1:2, p. 186; 1931, 1:3, p. 396.

Of North Palisade.—*Sierra Club Bulletin*: 1904, 5:1, plate 5; 1915, 9:4, plate 102; 1921, 9:2, plate 61; 1924, 12:1, page 62; 1926, 12:3, page 304; 1931, 16:1, plate 4; 1934, 19:3, plate 1; 1938, 23:2, plates 30 and 33.

Of Mount Sill.—*Sierra Club Bulletin*: 1904, 5:1, page 11; 1924, 12:1, p. 64; 1926, 12:3, p. 304; 1934, 19:3, plates 19, 24; 1938, 23:2, plate 31.

Of Palisade Crest.—*Sierra Club Bulletin*: 1934, 19:3, plate 24.

Of the West Peak of Middle Palisade.—*Sierra Club Bulletin*: 1922, 11:3, plate 78; 1934, 19:3, plate 21.

Of Middle Palisade.—*Sierra Club Bulletin*: 1917, 10:2, p. 223; 1922, 11:3, plates 77 (on which the route is marked) and 79; 1934, 19:3, plates 20, 21.

#### PRINCIPAL PASSES

There are no passes over the Palisades for stock. Several are suitable for knapsackers (*i. e.*, first class), while still others are only for experienced climbers. The explored passes over the Crest are listed from N. to S., followed by passes over the eastern and western spurs.

*Jigsaw Pass* (12,800), *E. to W.* First class. Offers a convenient route from Fifth Lake to Bishop Pass. Follow the S. shore of Fifth Lake, and ascend talus and slabs S. of the creek flowing between

Peak 12,981 and Peak 12,986. It is well to contour from 200-300 feet above the stream to avoid the difficult bluffs over which it cascades about 400 yards above the lake. Once past these bluffs follow the N. branch of the creek for about a mile until it divides again, the division being marked by a small bluff. It is easiest to turn this bluff to the left and contour over gradual slopes to the divide. In a normal year this last portion is covered with snow throughout July. Jigsaw Pass is not the lowest point on the divide, but lies a few hundred yards S., beyond a minor rise. It is marked with a cairn. Peak 13,250 separates the pass from Mount Agassiz. Descend on the W. by a steep but easy chute and cross the large talus blocks to the nearest point of the Bishop Pass Trail, which is easily seen from the top of the chute.

———*W. to E.* As with many climbs in the Sierra, the W. approach to Jigsaw Pass is a problem in choosing the correct chute. From the trail at Bishop Pass the N. ridge of Mount Agassiz will be seen to extend one mile to the first important peak of the Inconsolable Range. Jigsaw Pass is just S. of the low point of this ridge, and is separated from it by an angular but low peak. Proceed from the trail into the little recess just NW. of Mount Agassiz, and cross the talus to the chute ending at the pass. The climb, over scree, grass, and well fractured granite, will be found much easier than it had appeared. On the two-mile descent to Fifth Lake, all one need remember is to keep S. of the inlet stream, and to stay well above it for the last 400 yards, after which an easy descent to the lake is assured.

*Agassiz Col (13,350), E. to W.* Second class. Higher and more difficult than Jigsaw Pass, and providing knapsackers the opportunity for sidetrips to Mount Agassiz or, indirectly, to Mount Winchell. Follow the Palisade Glacier Trail lateral S. to Sam Mack Lake, turning W. from the upper end of the lake, keeping just N. of the E. spur of Mount Winchell, which cannot be seen until the lake is passed. The route leads past a lakelet that is nearly filled in, then up through a series of terminal moraines (easier going to the right of the moraines) to the Winchell glacier. The col is the low point at the head of the cirque, and is best reached by climbing to the top of the right (N.) side of the glacier, then continuing diagonally up to the left over broken rock. The descent over scree

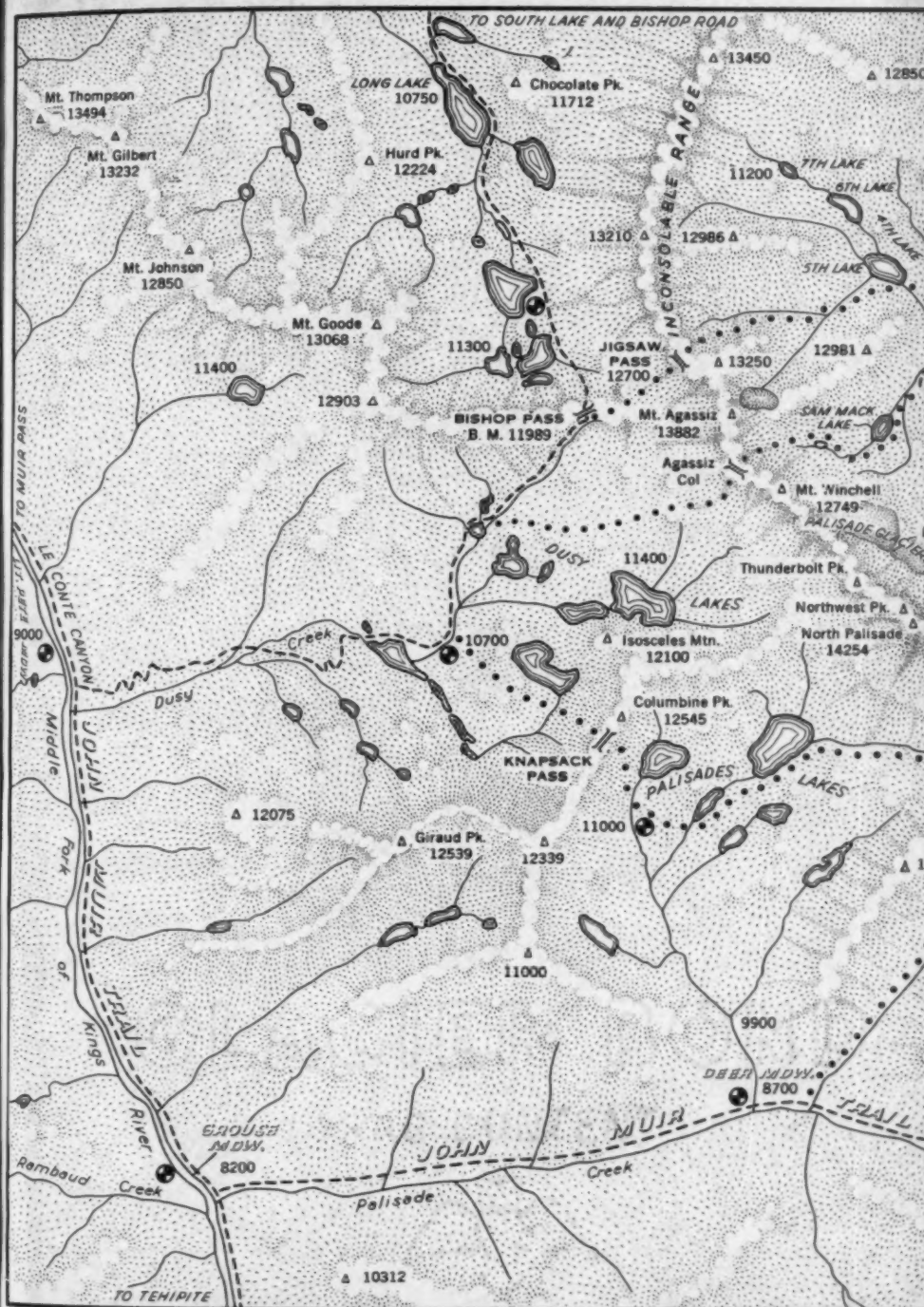




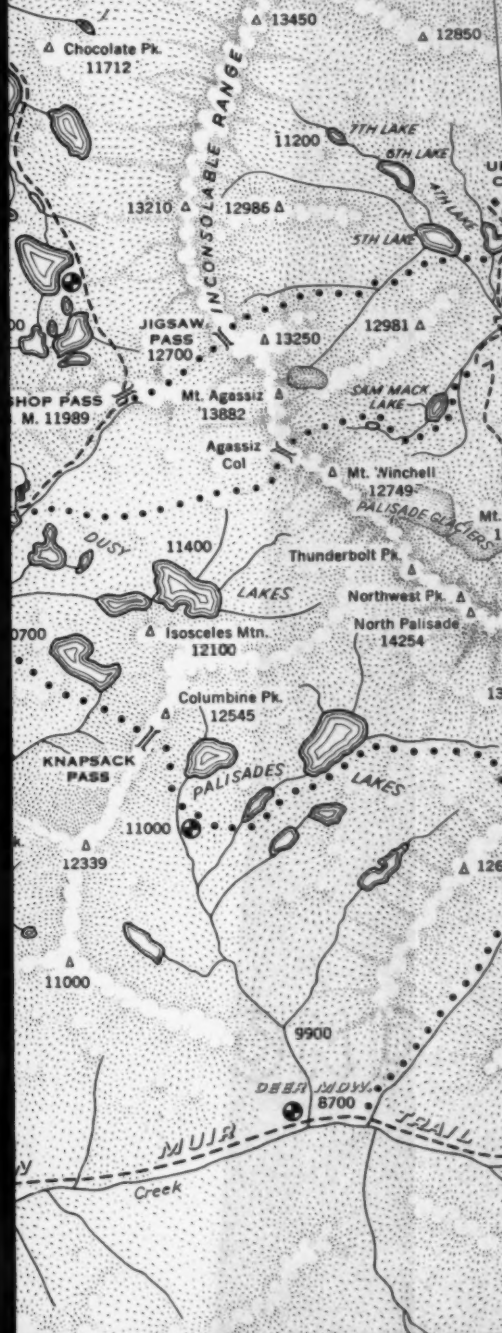
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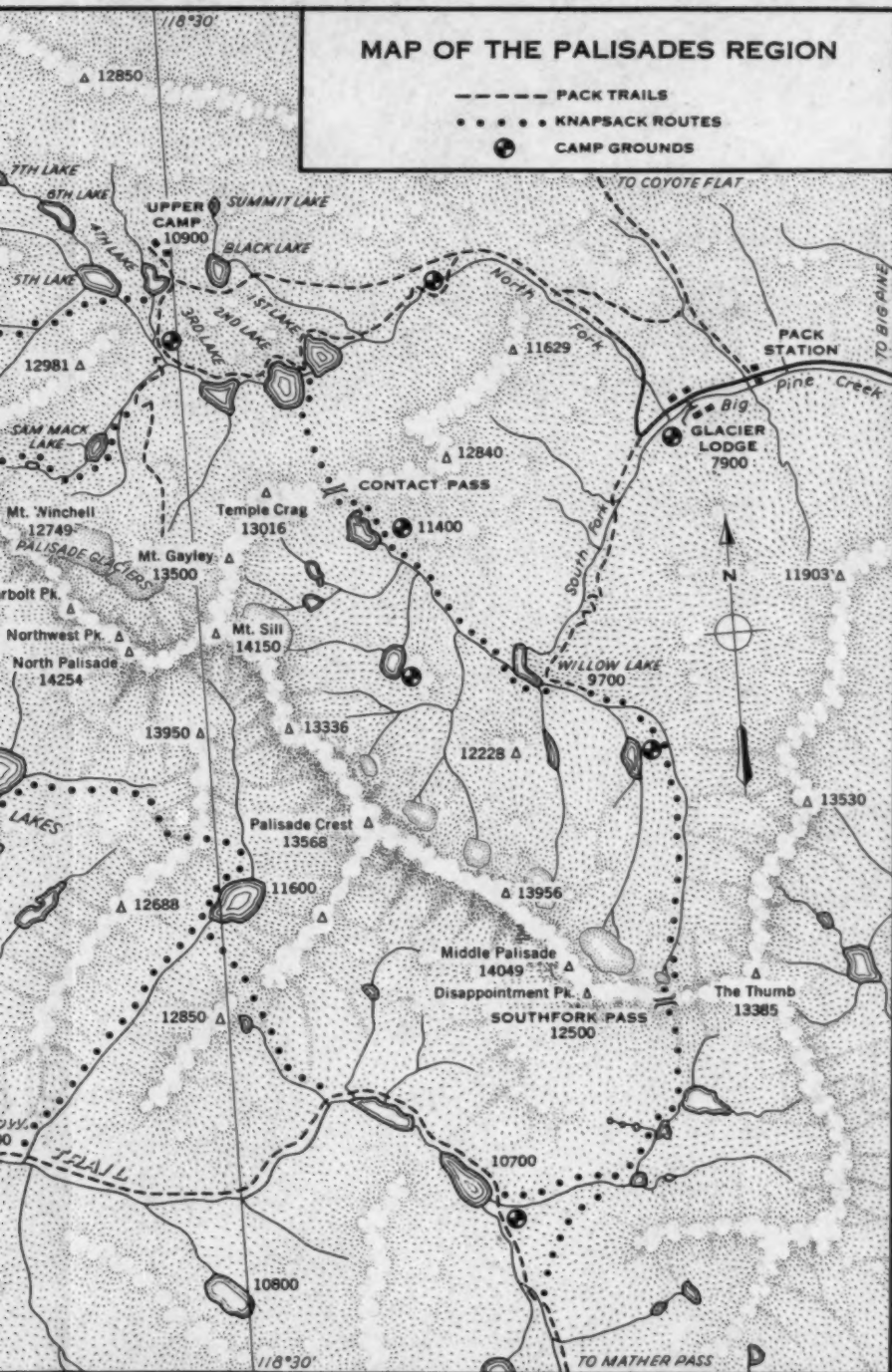


TO SOUTH LAKE AND BISHOP ROAD



# MAP OF THE PALISADES REGION

- PACK TRAILS
- ..... KNAPSACK ROUTES
- CAMP GROUNDS





and talus to Dusy Basin is not nearly so tedious as the climb back.

—*W. to E.* Finding the correct chute (the largest between mounts Winchell and Agassiz) is easier than with the previous pass, and more essential, since the chute to the col S. of Mount Winchell heads in a 100-foot cliff. Ascend the chute to the notch, and descend the stream from the Winchell glacier to the Glacier Trail.

*The U Notch* (13,900), *NE. to SW.* Second class on the SW., third class on the NE. This spectacular alpine notch separates North Palisade from the Mount Sill massif, and from it both peaks are accessible. Approach by the main Palisade Glacier (lying under Mount Sill and terminating in a series of moraines just beyond the end of the Palisade Glacier Trail). The broad, steep couloir leading to the U-shaped notch cannot be mistaken. Late in the season the bergschrund may be a serious obstacle. It is usually best crossed on the NW. side. Ice is always present in the couloir, and one should derive no sense of false security if the ice is covered with snow. It is advisable to work up along the NW. edge of the couloir, out of range of possible snowslides. The "peninsula" of granite that is encountered half-way up from the bergschrund is unsound, and care must be taken to avoid launching rocks upon climbers below. Once the ice is passed the couloir leads without difficulty to the notch. This couloir, like others on the NE. side of the range, may at times offer serious objective dangers (falling snow, ice, or rock), and any attempted ascent should be guided by sound judgment. There should be at least one ice-ax in the party. The descent to Palisade Basin is over scree and talus that increases in size with the descent. Early season descents are relieved of tedium by a covering of snow, but again an ice-ax is worth its weight in safety.

—*SW. to NE.* From the upper end of the highest and largest of the Palisade Lakes, one may see at the base of the SW. wall of North Palisade three white cliffs, resembling inverted shields, and marking the entrances to two chutes. Ascend the right (SE.) of these and follow it to the top. This chute marks a joint-plane in the Crest, and is particularly straight. The route down the peninsula of rock in the NE. couloir is partly marked with ducks which lead to the lower NW. side. It is safest to follow the NW. wall of the couloir to the bergschrund. This crevasse has at times been so choked with snow that it was possible to slide over it in a sitting glissade



(to distribute weight). At other times it has been nearly 30 feet high, and it is perhaps best to look before sliding. Emerging from the couloir upon the glacier one will notice a lateral moraine marking the left edge of the lobe, and bearing almost due north. This same line is continued in a low ridge that appears just beyond the jumbled series of recent terminal moraines of the glacier. The indistinct trail to the lakes starts just on the right (E.) side of this low ridge, but within a mile works back to the left side, dropping to a meadow from which the course of the trail is unmistakable.

*Southfork Pass* (12,250), *N. to S.* First class. This is the lowest point between the Middle Palisade and The Thumb, and provides the best knapsack route between the South Fork of Big Pine Creek and the Muir Trail near Mather Pass. From the end of the South Fork trail follow the easternmost of South Fork tributaries, passing E. of Braynard Lake, then work up over open granite slopes, through old moraines, and across the small glacier NW. of The Thumb. A steep narrowing slope leads to the notch, and it makes little difference upon which side one chooses to pass the tiny pinnacle in the notch. An open, gradual lake basin extends to the S., and the stream which drains it crosses the Muir Trail.

———*S. to N.* Follow the stream which enters the upper of the twin lakes at the head of Palisade Creek E. a mile and a half into the amphitheater which it drains. From the first large lake in this basin it is another mile and a half due N. to Southfork Pass. Descending from The Thumb glacieret keep to the right of the stream. The trail will be found about two and one-half miles below on a bench 100-200 feet above and S. of Willow Lake, which may readily be identified by meanderings of the inlet through a meadow overgrown with willows.

*Contact Pass* (11,650), *N. to S.* First class. A rounded notch just E. of Temple Crag affording a good route between the two forks of Big Pine Creek. This pass receives its name from the contact between two different granites to which it owes its origin. From the upper end of Second Lake follow this contact to the notch. A few hundred feet below and S. is a small lake that drains into Willow Lake, with the connecting stream about one and a half miles long. Follow the northerly side of the stream, crossing shortly above

Willow Lake, and climb 100-200 feet to the South Fork trail on the bench S. of the lake.

—S. to N. Follow the N. inlet of Willow Lake, and the N. branches of this inlet to the little amphitheater and lake at timberline just under Temple Crag, which may be identified by its easterly-sloping nivated slope and beautifully castellated summit. From here Contact Pass is unmistakable, and the route of descent to Second Lake is likewise obvious. A faint fisherman's trail leads from Second to Third and Fourth lakes. First Lake and a lateral to the main trail lie just beyond the unfinished Second Lake dam.

*Glacier Notch* (13,050). Second class. The saddle between mounts Sill and Gayley, connecting the Palisade and Sill glaciers. Climbing is not difficult on either side, and is probably easiest if one crosses the level portion of the saddle nearest Mount Sill. The chute leading N. from this portion is easiest to follow on the E. side.

*Knapsack Pass* (11,650). First class. Stock has been taken from Dusy Basin to Palisade Basin over the saddle S. of Columbine Peak, but it is recommended only for knapsackers. The divide between the two basins may also be crossed just NE. of Columbine Peak (at 11,950), or where the divide joins the Palisade wall (12,350).

*Other passes.* Knapsackers will find passes ranging from first to second class in difficulty over the NW. wall of Glacier Creek basin (at 12,250) and over the SW. spur of Palisade Crest (at 12,550), known as Chimney Pass. It is probable that the gap between Palisade Crest and Peak 13,336 will provide easy access to the South Fork basin from Glacier Creek, but no information is available. The col SE. of Mount Winchell involves a 100-foot rope-down from E. to W., and is therefore not practical to knapsackers.

#### THE PEAKS OF THE CREST, (N. TO S.)

*Mount Agassiz* (13,882). *Route 1 — West Slope.* First class. This is the easiest of the major peaks of the Palisades to climb. A splendid conception of the topography of North Palisade may be obtained from the summit. The basin of the Big Pine Lakes is especially beautiful. The ascent is made via the spur of the peak that extends to Bishop Pass. This slope might almost be described as nivated; the route has been used for a moonlight ascent.

—*Route 2 — Southeast Face and South Ridge.* Second class.

See "Agassiz Col" for approach. From the terminal moraines of the Winchell glacier work up the debris-filled chute that empties just N. of the moraines, heading on the ridge N. of Agassiz Col, and follow the ridge to the summit.—*Variation*. It is also possible to follow the E. side of the S. ridge all the way from the Col. This route is probably a better choice for the ascent, since it avoids the loose scree of the chute.

———*Route 3—Northeast Face*. Third class, with fourth class pitches. First ascent by Norman Clyde. Approach by the draw leading directly from Fifth Lake to Mount Agassiz. From the Agassiz glacier proceed to the foot of the Y-shaped couloir that heads on the N. arête, ascend half-way up to the "Y," then climb left (S.) to the rocks. Continue diagonally upward and half-way toward the summit over the moderately difficult face, after which it is possible to traverse right (N.) to the little arête dividing the lower portion of the route from the S. branch of the "Y." Follow this arête a short distance, and then either (a) continue along the E. face shelves to the top, or (b) cross the ridge to the less exposed NW. face, and follow it to the summit.

*Mount Winchell (13,749)*. Although this summit is accessible in winter (by the first route), and is not particularly difficult to reach, the ascent has not been made often. Nevertheless, the view down the beautifully sculptured western face and on across Dusy Basin is alone worth the effort of the climb. *Route 1—East Arête*. Second class. First ascent, June 10, 1923, by H. C. Mansfield, J. N. Newell, W. B. Putnam. From Sam Mack Lake ascend to the left (S.) of the E. ridge to within 400-500 yards of the Winchell col, climb the SE. face to the E. arête, and follow its irregular profile (large blocks) until the arête develops into a knife-edge (near the summit). From here an exposed route, requiring great care, leads a short distance to the left into a steep chute, which may be followed to the spectacular summit.

———*Route 2—West Face*. Fourth class. First ascent by Jules Eichorn, Glen Dawson and John Olmstead, July 29, 1930. From upper Dusy lakes ascend a chute to the left of the summit, and work upward to the top "through a series of tricky chimneys" (quotation from summit register).

———*Route 3—Southwest Chute*. Fourth class. First ascent by



W. Kenneth Davis and Jack Riegelhuth, August 11, 1938. "Start in the largest chute running down Winchell that has a large buttress on the N. side. On reaching the top of the chute traverse left into a notch (E. of the buttress), then climb to the top. On the W. face of Winchell there are many obvious routes, most of them fourth class climbs. Always start in the southerly chutes, since north chutes head on the N. arête, which involves fifth and possibly sixth class climbing."—Raffi Bedayan.

———*Route 4 — Southeast Face.* Possibly fifth class. Descended August 11, 1938, by W. Kenneth Davis and Jack Riegelhuth, their route following the skyline of Winchell as seen from Dusy Basin. The overhanging southerly buttress was turned to the E., but this did not obviate a rope-down.

*Thunderbolt Peak* (13,950). This name was inspired by a thunderstorm which harried the first ascent party, and hurried them off the ridge — but not until a bolt had struck very close to one of the climbers. *Route 1 — From the Glacier.* Third class. First ascent, August 13, 1931, by Norman Clyde, Robert L. M. Underhill, Bestor Robinson, Francis P. Farquhar, Glen Dawson, Lewis F. Clark, Jules M. Eichorn. Enter the SE. branch of the large double couloir which leads to a low notch, the second couloir NW. of the U Notch. When about half way up, work up the rocks to the right to the arête which separates the two branches of the couloir. Ascend the arête to the notch. From the notch ascend slabs leading to the N. and work upward along the SW. side of the ridge, finally climbing to its crest, and following it to the summit block.

———*Route 2 — Southwest Side.* Third class. First ascent, August 3, 1933, by Norman Clyde, John Poindexter, Philip Von Lubkin. Climb the large chute just N. of the divide between Palisade and Dusy basins and proceed from the notch as in Route 1.

———*Route 3 — Traverse NW. to SE.* Fifth class. Pitons required. First done, August 11, 1938, by W. Kenneth Davis and Jack Riegelhuth, who traversed along the ridge from the col SE. of Mount Winchell to Thunderbolt Peak. The first third of the route was third class, the rest fourth and fifth class. This was a portion of a traverse of the Palisade ridge from Mount Winchell to the North Palisade; the total time from Dusy Basin was 13 hours.

*North Palisade* (14,524). *Route 1 — Southwest Chute (Le Conte*

*Route*). Third class. First ascent, July 25, 1903, by Joseph N. Le Conte, James K. Moffitt, James S. Hutchinson. Enter the chute described as the W. approach to the U Notch. About half-way up, at the upper end of a bare granite bottom area in the chute, where it widens out somewhat, is a narrow ledge running to the left (NW.). Follow the ledge, which is only a few feet wide at one point, around to the next chute. Climb this second chute until progress is stopped, then cross to the right to a third chute, which usually has snow in it, and which is not visible from below, and ascend to the crest of the ridge. Then proceed NW. over large blocks to the summit.

———*Route 2—Via the U Notch from the Southwest.* One fourth class pitch, the rest second class. First ascent, July 19, 1921, by Hermann Ulrichs. Proceed to the U Notch (see section on Passes); then ascend a steep, open chimney on the W. wall of the notch. From the top of the chimney an easy ridge leads to the summit. — *Clyde's Variation.* Leave the chute about 100 feet down on the S. side of the notch. Scale the left (W.) wall, work to the left around a shoulder, then to the right to the crest and summit.

———*Route 3—Via the U Notch from the Glacier.* Third class, with one fourth class pitch. First ascent, June 1928, by Norman Clyde. Ascend to the U Notch from the glacier (see section on Passes); thence to the summit as in Route 2.

*Route 4—North Face.* Fourth class. First ascent, July 1929, by Norman Clyde. Climb the W. wall of the first couloir W. of the couloir leading to the U Notch. Ascend to a little notch NW. of the summit and follow the ridge (mostly on the SW. side) to the summit. It is also possible to cross over to the N. face of the main peak when about half-way up the couloir, and to climb the face directly to the summit.

———*Route 5—West Chute.* Fourth class. First ascent, July 13, 1933, by James Wright. From the extreme N. portion of the Palisade Basin climb up the "second large cleft which narrows in the ascent; thence up a steep snow-tongue into a wide chute. At the head of this chute cross to the next chute to the SE., then climb to the base of the pinnacle NW. of the summit. Cross to the E. side of the ridge, carefully cross a notch, and proceed to the summit."

———*Route 6—Northwest Ridge.* Fourth class. First ascent,

June 29, 1934, by Norman Clyde, David R. Brower and Hervey Voge. From the notch between Thunderbolt Peak and North Palisade (see *Thunderbolt Peak, Route 1*) work upward along ledges on the SW. side of the ridge. When progress becomes difficult, climb by an intricate route behind some large blocks to the crest and follow it to the Northwest Peak of North Palisade. From there the best route follows the crest rather closely, crossing from side to side several times, and, in particular, crossing to the N. at a prominent gendarme, in order to pass a difficult gap. — *Variation.* Cross to the NE. (glacier) side of the ridge when progress on the SW. side becomes difficult; then proceed along ledges and snow until directly beneath the main summit; then climb directly to the top.

———*Route 7 — West Face.* Fourth class, with one fifth class pitch. First ascent, August 1936, by Richard M. Jones and Mary Jane Edwards. Start to the left of a black streak on the base of the mountain, cross to the right above this mark by going under a large, fallen slab on the slanting shelf, continue up a fairly wide chute to a point where it becomes very narrow, cross to the right into the next chute on a horizontal white vein, passing slightly above a large block. Then proceed more or less directly to the summit.

*Northwest Peak of North Palisade (14,200). Route 1 — North-east Face.* Fourth class. First ascent, July 9, 1930, by Norman Clyde. The first half of this route is the same as *North Palisade Route 4*. One then proceeds directly up the face to the top. Or one can return to the peak from the notch separating it from North Palisade. The summit of this peak, a large block somewhat resembling a milk bottle, can be climbed without artificial aid.

———*Route 2 — Traverse from North Palisade.* Fourth class. First ascent, August 9, 1931, by Norman Clyde, Francis P. Farquhar, Robert L. M. Underhill, Bestor Robinson, Lewis F. Clark, Neill C. Wilson, Elmer Collett, Glen Dawson and Jules M. Eichorn. See *North Palisade, Route 6*.

———*Route 3 — Northwest Ridge.* Fourth class. See *North Palisade, Route 6*.

*Mount Sill (14,150). Route 1 — Southwest Slope.* First class. First ascent, July 24, 1903, by Joseph N. Le Conte, James K. Moffitt, James S. Hutchinson, Robert D. Pike. Start from the foot of

the little glacier at the head of Glacier Creek (in the amphitheatre SE. of North Palisade). The summit is not visible from that point. One can either boldly ascend the steep rocky cliff on the right (N.) side of the amphitheater, starting from the right side of the lower end of the glacier and ascending directly away from the glacier to the summit, or one can follow up the glacier and the snowfield at its head and then work to the E. over easy slopes to the top.

———*Route 2 — Northwest Face.* Third class. First ascent, June 10, 1927, by Norman Clyde. A number of routes are possible up the face to the summit, or up the wall to the ridge W. of the summit. There is a good deal of loose rock, which may or may not be covered by snow. The bergschrund of the main Palisade Glacier may cause difficulty. Ice-ax necessary.

———*Route 3 — Traverse from the U Notch.* Three fourth class pitches; the rest first class. First ascent, July 27, 1930, by Jules M. Eichorn, Glen Dawson, John Olmstead, Charles Dodge. From the U Notch climb about 20 feet up the SE. wall and traverse right to the SW. arête; then ascend to the ridge leading to the summit — a little notch with an overhanging wall may be turned to the right.

———*Route 4 — North Couloir.* Third class, with a fourth class traverse. First ascent, September 25, 1931, by Walter A. Starr, Jr. From Glacier Notch work up the chute between the face of Sill and a small pyramid under the face, passing through the gap between, then along difficult ledges on the face of Sill to a knife-edge which leads to the crest on the N. side of the summit. Then ascend the easy ridge to the summit.

———*Route 5 — Southeast Ridge and East Couloir.* Third class. First descent, June 16, 1934, by Norman Clyde, Hervey Voge and David R. Brower. Follow the SE. ridge to the first deep notch, where a couloir runs down just S. of the precipitous E. face. Descend the couloir to a point where it widens out and there is a sloping shelf on the mountain wall. Descend the branch of the couloir on the right (SE.) of this shelf to the glacier. Ice-ax necessary.

———*Route 6 — North Buttress.* Fourth class. First ascent, July 3, 1938, by Spencer Austin, Ruth Dyar, Ray Ingwersen, Richard M. Jones, Joe Momyer. From Glacier Col cross the N. couloir diagonally upward to the N. buttress. About half-way up the buttress traverse to the right (W.) about 150 feet, then climb a

difficult 120-foot pitch and traverse back to the left (E.) to the face of the buttress again; thence proceed up huge blocks to the top. The exposure is much greater than on *Route 2*, but this route is almost free of loose rock and is snowless at a much earlier date.

*Peak 13,336.* No ascent recorded.

*Palisade Crest (13,568).* This is a serrated crest carrying many jagged points. No recorded ascents.

*Peak 13,956. (West Peak of Middle Palisade). Route 1 — West Ridge and North Face.* Third class. First ascent, June 9, 1930, by Norman Clyde. Go up the glacier N. of the peak and ascend the first couloir W. of the peak to the ridge. Then traverse down the N. face, around a buttress, and into the main chute N. of the peak. Climb to the ridge just W. of the peak and follow the summit.

———*Route 2 — South Face.* Third class. First ascent, June 19, 1930, by Norman Clyde.

*Middle Palisade (14,049). Route 1 — Southwest Face.* Third class. First ascent, August 26, 1921, by Francis P. Farquhar and Ansel F. Hall. The history of this peak reveals that much disappointment has resulted from the choice of the wrong chute. Those wishing to climb Middle Palisade instead of Disappointment Peak should take the third chute north of the angle between the Middle Palisade Wall and its SW. spur, counting the chute that marks the angle as the first. The first and second chutes lead to Disappointment Peak. The third leads to Middle Palisade, and heads just N. of the little sawtooth peak between the two peaks. The route is intricate at the top, and there are a number of variations. Three-fourths of the way up, work to the right out of the chute and ascend the face S. of the summit to the top.

———*Route 2 — Northeast Face.* Fourth class. First ascent, by Norman Clyde, June 7, 1930. The route follows up an arête that runs NE. from the summit and ends in a buttress at the glacier. Go onto the arête either by a couloir to the north of the buttress (this is dangerous if loose snow is present), or by broken portions of the cliff in which the buttress terminates.

———*Route 3 — Traverse from Peak 13,956.* Fourth class. First done, July 30, 1933, by Jules M. Eichorn and Glen Dawson.

Follow the ridge, except for a few deviations to pass gendarmes.

*Peak Disappointment* (13,975). This is the high point on the ridge just SE. of Middle Palisade; from some places it appears to be the highest peak.

———*Route 1 — Southwest Face*. Second class. First ascent, July 20, 1919, by J. M. Davies, A. L. Jordan, H. H. Bliss. Climb up the large chute just north of the prominent buttress or spur, which leads to a point just S. of the summit.

———*Route 2 — Northeast Couloir*. Third class. First ascent, June 20, 1930, by Norman Clyde. A good climb, with some difficulty at the foot of the couloir.

*The Thumb* (13,400). (Sometimes called East Palisade. The elevation is incorrectly given in U. S. G. S. maps as 13,885.) *Route 1 — South Face*. Second class. First ascent, December 12, 1921, by W. B. Putnam. Climb up the rather easy S. face. Putnam approached from Birch Creek and crossed the main divide at the head of the cirque between The Thumb and Peak 13,474, but the approach can also be made from Palisade Creek or Southfork Pass.

———*Route 2 — Northwest Face*. Third and fourth class. First ascent, June 5, 1930, by Norman Clyde. Climb up a couloir of the NW. face.

#### PEAKS EAST OF THE CREST (N. TO S.)

*Inconsolable Range* (13,450). First known ascent, June 29, 1930, by Norman Clyde. First class. Easily ascended from Seventh Lake via the E. ridge.

*Peak 13,210*. First ascent, June 15, 1937, by Norman Clyde.

*Peak 13,250*. Second class. Ascended June 14, 1934, by David R. Brower and Hervey Voge. An interesting scramble from Jigsaw Pass or the Agassiz glacier.

*Peak 12,986*. *Route 1 — East Ridge*. Second class. First ascent, July 6, 1929, by Norman Clyde. From Fifth Lake follow the E. ridge of the peak, traversing on the N. side. The summit is a large, smooth vertical block.

*Peak 12,981*. *Route 1 — Northeast Face*. Third class. First

ascent, July 4, 1930, by Norman Clyde. A good rock-climb, involving the passing of numerous pinnacles.

———*Route 2 — West Ridge.* Second class. First ascent, June 14, 1934, by David R. Brower and Hervey Voge. Follow the ridge from the little glacier NE. of Mount Agassiz.

———*Route 3 — Southeast Face.* Second class. Descent, June 14, 1934, by David R. Brower and Hervey Voge. The face is cut by rough, broken chutes, which are readily climbed or descended.

*Mount Gayley (13,550.) Route 1 — Southwest Ridge.* Second class. First ascent, June 10, 1927, by Norman Clyde. Follow the ridge from Glacier Col.

———*Route 2 — South Face.* Second class. First descent, September 28, 1931, by Walter A. Starr, Jr.

*Temple Crag (13,016).* This is one of the most beautiful mountains in the Sierra Nevada, chiefly because of the splendid sculpture of its N. and NW. precipices, which are of dark, massive granite and rise 3000 feet above the lower Big Pine Lakes. The N. face is cut by two deep and narrow snow-chimneys; the NW. face by a broader couloir. These have carved the intervening buttress into tremendous, fantastic towers. First ascent was made by the U. S. G. S. in 1909, probably by Route 1. Two new routes have been established, but these have hardly touched the possibilities. *Route 1 — East Approach.* Second class. Climb the deepest chute in the broken East Face to the gradual nivated slope above it. A shallow chute connects the top of this slope with a spectacular knife-edge leading to the summit. — *Variation.* (Norman Clyde, November 7, 1926.) At Contact Pass there is a break in the rock which forms the W. wall of the pass, just S. of its highest point. A fourth class pitch here, either up the crack or just outside it, takes the climber to the nivated slope of *Route 1.*

———*Route 2 — Northwest Face.* Third class. First ascent, by Norman Clyde, in 1930. Go up the chute SE. of the broad NW. snow-couloir to its junction with the latter, then follow the right wall of the main couloir to the broken face at its head. The face is climbed to the W. arête, which is then followed to the summit.

———*Route 3 — North Face.* Fourth class. First ascent, August 11, 1931, by Norman Clyde, Robert L. M. Underhill, Glen Dawson,



Jules M. Eichorn. Ascend the narrow crack just E. of the western snow-chimney, and climb the E. wall of the snow-chimney to a point just below the notch between Temple Crag and its N. abutment. Proceed diagonally upward and E. to the summit knife-edge.

*Peak 12,840.* First ascent, in 1925, by Norman Clyde.

*Peak 12,228. Route 1 — North Face.* Third class. First ascent, July 18, 1937, by Esther Voge and Hervey Voge. An interesting climb is to be had by following a steep chute just SW. of a cirque high on the N. face of the peak, and then climbing the steep talus to the top. Descent (or ascent) by way of the cirque is second class.

*Peak 13,530.* First ascent, November 14, 1926, by Norman Clyde.

#### PEAKS WEST OF THE CREST

*Columbine Peak (12,545).* First ascent, prior to 1925, by persons unknown. Second class by either NE. or S. ridge.

*Peak 12,339.* First ascent, by John White, August 11, 1938. A second class traverse from Knapsack Pass.

*Isosceles Peak (12,150).* This is the most striking feature of the S. wall of Dusy Basin, and is a very good third class climb by the NW. face. First ascent, July 10, 1938, by Wear and Morse.

*Giraud Peak (12,539).* First ascent, in 1925, by Norman Clyde. Second class by the E. arête.

*Peak 13,950.* (Half a mile SW. of Mt. Sill.) First ascent, July 25, 1925, by Walter A. Starr and A. M. Starr. A second class climb from the cirque SW. of Sill.

*Peak 12,688.* First ascent, in 1925, by Ralph Arthur Chase.

*Peak 12,250.* (SW. of Palisade Crest.) No ascent recorded.



## CLIMBING IN THE BUGABOOS

BY SPENCER AUSTIN

**D**ECIDING to try some climbing further afield, Glen and Muir Dawson, Robert Brinton, Howard Gates, Homer Fuller and I arrived in Spillimacheen, B. C., on the Columbia River, August 15, with our objective the Bugaboo group in the Purcell range. This was the region so highly praised by the Swiss-Canadian guide, Conrad Kain, who compared it favorably with the best of the minor climbing centers in Europe. He made many first ascents in this region in 1916.

The 27-mile road leading west to the Bugaboos from Spillimacheen had been improved enough to be passable to a high-wheeled truck, so we hired one with its owner to drive us in. This was a bit of luck that saved us two laborious days of back-packing. As it was, seven of us rode in luxury, pushing and worming our way through the "jungle," mending tires, knocking the springs together when they spread out like a fan, and eating wild berries from the bushes that arched the road. Three and one-half hours later, after going through low, burned-over country and then up a Sierra-like valley, we rounded a turn near the end of the road, and the glories of the Bugaboos appeared ahead at the end of a level forested valley. This group is like nothing in the Sierra. It is not a range of mountains connected by only slightly lower ridges, as is much of the Sierra. It is a group of nine nearly separate spires rising steeply out of glaciers. All of the peaks, incidentally, could be enclosed in a rectangle of about four by eight miles, so could be climbed from one camp.

From the end of the road it was two and a half miles of easy packing through lovely forested country, criss-crossed by many milk white glacier streams, to the spot where we established our first camp, about three-quarters of a mile below the terminal moraine of the Bugaboo Glacier. In this latitude timberline is about 7000 feet, although the Bugaboo Glacier falls far below this point. As we were bringing up our second load we had our first taste of the notoriously unpredictable Bugaboo weather. It began to rain. That afternoon we visited a nearby camp occupied by three members of the American

Alpine Club. They gave us much information, to wit: that they hadn't climbed much because the weather had been bad for several weeks; was bad (obviously); that there was no telling when it would be better, although perhaps it would clear when snow fell and remained on the ground for a few days. (It did just that two days before we left.) With this information we resolved to make the most of any half way decent weather that we might encounter. After a few days we made a reconnaissance up to the glacier and on the left lateral moraine found a much better campsite, one that had been occupied earlier in the summer by Fritz Wiessner of Mount Waddington fame. After a few more days of unusable weather, Bob, Glen, Muir, Homer, and I started for Bugaboo Spire, 10,250 feet (plus or minus), as our main objective. From our camp we crossed the moraine, crossed the glacier that is bounded by Bugaboo, Snowpatch, and Crescent spires, and then went up the Bugaboo-Snowpatch col, hacking steps on the steeper part above the bergschrund. From the col we enjoyed the fine view across Warren Glacier to Pigeon and Howser spires, but as the sky was completely overcast we hurried on up the first thousand feet of unroped climbing, sticking all the while to the east side of the ridge. This easy scrambling, however, petered out in a sheer rock-wall ahead, so we put on crêpe soles, roped up, and went up onto the crest of the ridge. From here on it was difficult rock-work, and we were glad that the Bugaboos were composed of granite, like that of the Sierra, rather than of the rotten rock of Banff and Lake Louise. We encountered several chimneys and a few other bits that served to whet our appetite for the famous gendarme that lay ahead out of sight. There was not enough snow to bother us, but some of the rock was covered with wet lichen that was "fun" to skate on in rubber soles. Ahead lay the gendarme, a stark pyramid blocking our way along the ridge. Obviously the only way was to go over it half way up its shoulder. This pitch caused Conrad Kain to rank Bugaboo as his most difficult Canadian climb, and I can appreciate his point of view, especially when it is recalled that he led it without pitons and for the first time. He required an hour and a half to make the seventy feet involved. With Bob leading, we went across a ledge to the right of the gendarme, put in one piton about six feet up, and climbed eighteen feet to an airy seat half way up the thirty-five degree knife-edge of the pyramid. On the other side we found a piton a few feet

out on the almost holdless fifteen-foot traverse that led to a vertical crack. Each in turn stood on the piton and launched himself toward the crack, probably without looking at Warren Glacier 2000 feet below. It was, as Glen said, a short, delicate balance climb, but for me it approximated a quick breathless scramble.

With the five of us over this pitch it was a comparatively easy climb to the summit, or rather to the summits, for Bugaboo has two, both according to Kain about the same height. As the weather was very threatening and as a rope-down would have been necessary to reach the second summit we were content to remain where we were and stopped there only long enough to register and take a few photographs. This was the third ascent. When we came again to the gendarme we roped down eighty feet to a ledge that led us around to the beginning of the gendarme pitch. In pulling our rope down the end fouled in an impossible place and we were forced to cut it and lose thirty feet of our 150-foot three-man rope.

When we came to the Bugaboo-Snowpatch col we took a few minutes to go onto Warren Glacier to have a look at the west side of Snowpatch Spire. This peak is without doubt the great prize of this district. It has never been climbed. Conrad Kain said, though he did not make a real attempt, that it was beyond his powers. It is a sheer spire, the strata on all sides are vertical, there are no ridges leading to it, and parts of it appear to overhang. We were told that Wiessner had attempted it earlier in the year, and that he almost reached its distinguishing feature, the snowpatch. According to our information he could find places for only a few pitons. We were much impressed by this peak, but we decided not to attempt it. Several days, at least, of continued good weather would have been necessary, and, even so, the chances of success appeared to be very remote. After looking at it carefully, it is my opinion that it would be primarily an engineering feat with small chance of finding cracks for the necessary ladder of pitons. As Glen said, "If they put Snowpatch on the floor of Yosemite, it still would be a long time before it would be climbed." It is somewhat lower than Bugaboo.

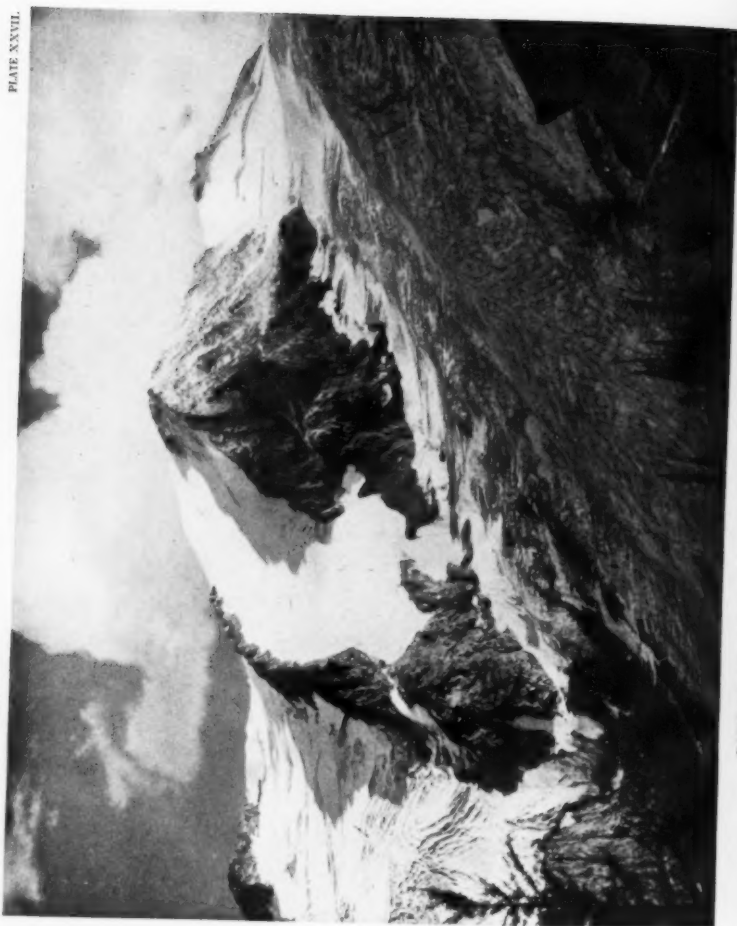
Arriving back in camp, it began to rain again, but when we awoke in the morning we found six inches of snow. That day we dug out, and the following day we formed two parties to climb Crescent and Brenta spires. Bob, Homer, and Gates climbed Crescent, and declared it "easy." They were well rewarded by the

magnificent view. Glen, Muir, and I climbed Brenta, easy enough except for four hundred feet getting onto the arête between Crescent and Brenta. From the arête it was unroped climbing, except for a short section near the top. This was the first really clear day we had seen and we enjoyed it to the full, loafing an hour and a half on the summit. We believe this was the second ascent. To the west, the peaks of the Bobby Burns Range, across Warren Glacier, unnamed and unclimbed, fascinated us. The last day, while we broke camp, Bob and Glen climbed Maramalada, which they described as a good climb, made somewhat difficult by the new snow on the holds. It is the most prominent peak seen up-valley from the end of the road, surrounded on both sides by glaciers. Later that day Glen and Bob met us at the camp of the American Alpine Club members, where a kind invitation to lunch "saved our lives." The last two days in our camp ground squirrels of astonishing audacity outwitted us at every move and made sure of a luxurious supply of winter food for themselves while threatening us with immediate starvation.

Later we visited Banff, Lake Louise, and the Tetons of Wyoming and enjoyed some fine climbing. None of the peaks, however, impressed us as did the Bugaboos. The latter country is wild, rugged, and abounds in game. The scenery beggars description. As a Chinese proverb has it, "One picture is worth a thousand words." Beside the fine climbing enjoyed, the trip was made notable by the fact that six men could travel 4000 miles in twenty-five days in one car, climb six peaks, and return better friends than ever.



SNOWPATCH SPIRE. FROM THE TOP OF BUGABOO SPIRE  
By Spencer Austin



PART OF BUGABOO GLACIER, AS SEEN FROM THE UPPER CAMP  
By Spencer Austin

PART OF BUGABOO GLACIER, AS SEEN FROM THE UPPER CAMP

By Spencer Austin

SHERA CLUB BULLETIN, VOL. XXIV.

Flat-top

Snowpatch

Pigeon

Bugaboo

PLATE XXVIII.

Lower



VIEW FROM BRENTA SPIRE

By Spencer Austin



BEFORE THEM STRETCHED THE GRISLY PLAYAS OF DEATH VALLEY

Photograph from Danie's View. Copyright by Stephen H. Willard



BEFORE THEM STRETCHED THE GRISLY PLAYS OF DEATH VALLEY  
Photograph from Dante's View. Copyright by Stephen H. Willard

SIERRA CLUB BULLETIN, VOL. XXIV.

PLATE XXX.



BEYOND THE DESOLATE SALT-BEDS ROSE THE FORBIDDING WALL  
OF THE PANAMINTS

Photograph Copyright by Stephen H. Willard



WILLIAM LEWIS MANLY'S MAP OF THE FORTY-NINER ROUTES THROUGH DEATH VALLEY

Central sheet of three, in the Jayhawker Collection, Huntington Library

(Courtesy of the Henry E. Huntington Library and Art Gallery)



MANLY'S CHART OF THE JAYHAWKER PARTY'S ROUTE LEAVING DEATH VALLEY  
 From the original sketch in the Jayhawker Collection, Huntington Library  
 (Courtesy of the Henry E. Huntington Library and Art Gallery)



LAVA BOULDER IN EMIGRANT WASH, NEAR MOUTH OF  
LEMOINE CANYON, WITH INSCRIPTION — W. B. ROODS 1849

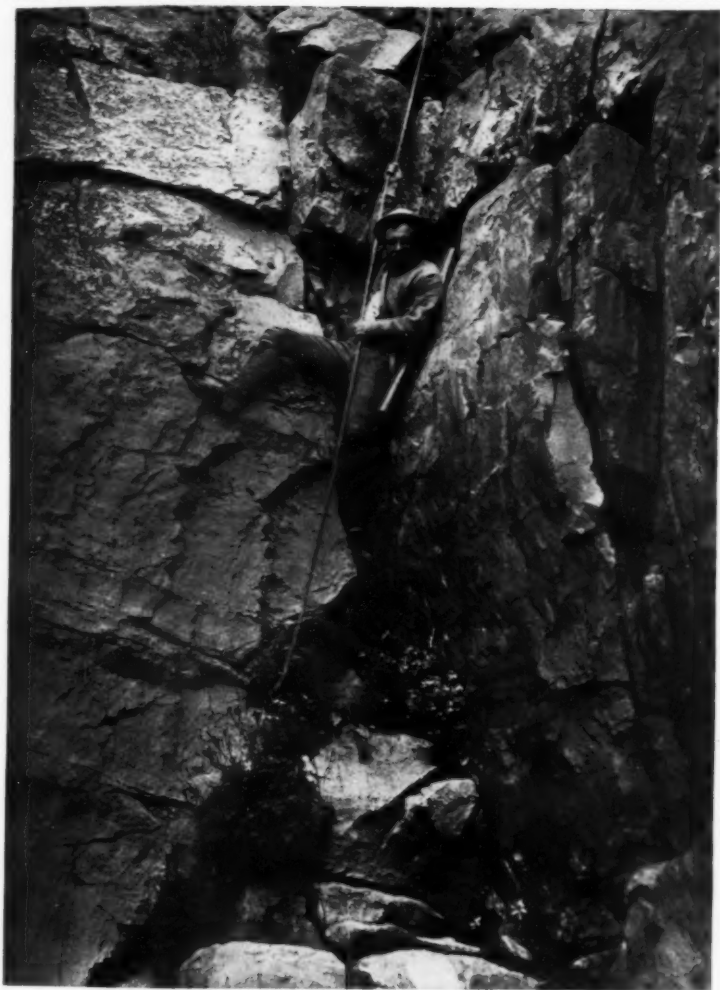
By Carl I. Wheat



LAVA BOULDER IN CANYON NEAR JAYHAWKER SPRING,  
WITH INSCRIPTION — 1849 W. B. R.

By H. Donald Curry

DEATH VALLEY RECORDS



CLARENCE KING



LAKE MARIAN, 1870  
By Clarence King

LAKE MARIAN, 1870  
By Clarence King

SIERRA CLUB BULLETIN, VOL. XXIV.



PLATE XXXV.

LAKE MARIAN, 1938  
By Marjory B. Farquhar



LAKE MARIAN, 1879  
By Clarence King



LAKE MARIAN, 1879  
By Clarence King

STANDARD PUBLISHING CO., NEW YORK

PLATE XXXVIII



LAKE MARIAN, 1908  
By Marjory B. Farniglar



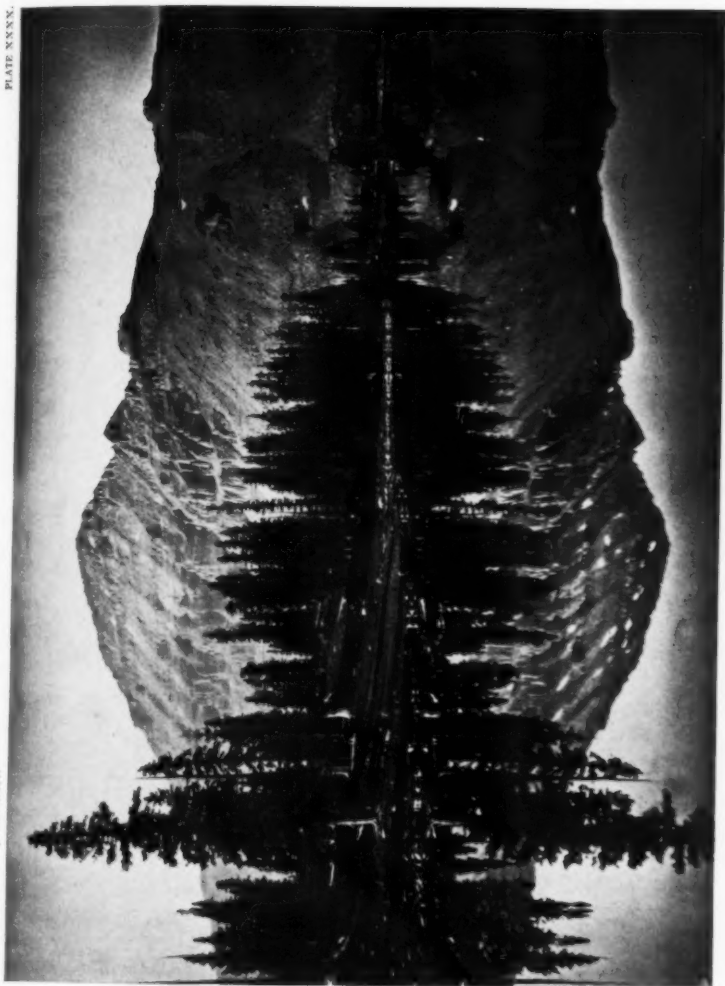
LAKE JAN  
(In the Uinta Mountains, Utah)

As photographed by Clarence King in 1870.

LAKE JAN  
(In the Uinta Mountains, Utah)  
As photographed by Clarence King in 1870

SIERRA CLUB BULLETIN, VOL. XXIV.

PLATE XXXX.



LAKE LALL.  
(In the Uinta Mountains, Utah)  
As photographed by Clarence King in 1870



GABRIEL SOVULEWSKI OF YOSEMITE  
1866 - 1938  
Photograph taken in 1896

## EXPLORING THE YOSEMITE POINT COULOIR

BY DAVID R. BROWER

WHY don't some of you young experts try the long gully leading to Yosemite Point?"

Coming from Charles Michael, who for decades had been exploring Yosemite's out-of-the-way places, this was more than a question. It was a challenge, experts or no. And so it was that noon of June 8, 1938, found Morgan Harris, Torcom Bedayan and me munching sandwiches, drinking occasionally from a tiny rill, relaxing on white, avalanche-polished granite, half-way up the deep couloir marking the joint-plane between Yosemite Point and Castle Cliffs. Below us was the scene of our morning's travail — the level Valley floor we had left early that morning (quarter to nine is early for rock-climbers), the old and obscured Indian Canyon Trail we had followed to the base of Castle Cliffs, the shoulder-stand, the airy traverse and the bushwhack that had marked our crossing under the Cliffs to the couloir. Immediately under us was the pitch that we imagined had stopped all predecessors some 1400-feet above the Valley. Indeed, it might well have stopped us had not Morgan obligingly taken the rope up ahead, exhibiting friction climbing that I would freely have explained as impossible had I not seen it. Here he had used our first piton, and belaying from below I had quietly wondered how much good it would have done in an emergency. The pitch was a polished slab, nearly holdless, and even after Torcom had followed Morgan's route I was still certain that it was too steep for tennis shoes — mine, at any rate. I had fudged a little by finding a more exposed variation to the right, with good old-fashioned holds that did not strain the imagination.

But that was all below, now. Above us the steep walls of the couloir, massive granite towering 1800 feet to the north rim, clearly defined our route as the floor of the couloir — a floor with an average angle of forty-five degrees for its full length of 4500 feet. Ahead of us a hundred feet was the first chockstone. Above that we recalled having seen a second from the Valley. What lay beyond?

Well, for one thing, there were two trails beyond, leading right to the top of the climb. One crosses from the top of Yosemite Falls.

The other is the old Indian Canyon Trail, so long abandoned that trees nearly forty years old grow in the middle of it. But as dyed-in-the-wool rock-climbers we weren't interested in trails, and preferred to see Yosemite the hard way. We had interpreted Charles Michael's question to mean that this was one of the hardest ways, and with a reaction peculiar to rock-climbers had set out to investigate. Besides, we felt an added zest in exploring new routes, rather than spending our time reviewing old ones. Specific lessons in retracing steps could better be learned on the rocks of the Bay Region.

Bestirring ourselves with difficulty after lunch we walked a short distance over rounded talus, mixed with a sprinkling of scree, until the vertical walls of the couloir converged, and at some time in the distant past had said "no thoroughfare" to one of the largest talus blocks of them all. From a distance I had seen an easy way to climb out around the left side, using a shoulder-stand. But close examination revealed that even a three-man stand couldn't pass a 25-foot overhang. There were no piton cracks, no holds. In the cavern beneath the chockstone there was a bit of indirect light, but none of us felt small enough to find how it filtered through. The wall on the right seemed worse.

Back in Berkeley, when we first learned the lore of pitoncraft, vast horizons had opened up before us. Nothing could be impossible. Pitons had conquered the Cathedral Spires. Why could not the sheer faces of Half Dome and El Capitan, or the slender spire of the Lost Arrow be as summarily dealt with? Of course the horizon soon closed in. Frustrated attempts on the "firefall route" up Glacier Point, the west face of the Sentinel, and even on little Pulpit Rock, had clearly demonstrated that it would take more than a little hardware to make boulevards in lichen-land. Here we were, again, with a knapsack full of pitons, stymied.

No. There was a possibility — a break in that right wall some thirty feet back down the gully, connecting with a ledge that paralleled the floor. At least there was a chance; so standing on Torcom's shoulder to surmount a slight overhang, I began resolutely to pound in pitons, unscrupulously relying upon direct aid to progress another ten feet up an open chimney, simply because there was no other way to get up. Then there were no more piton cracks. Threading the rope through the existing pitons and carabiners in several sequences and thus affording a variety of cross-tensions, I leaned out from

the face at all angles. But in the eight remaining feet of rounded granite I could perceive no route that was the least bit interesting. So I retired to the base and Morgan took the relief shift. While belaying, he had pointed out a way, a traverse to the left, which I had been loath to undertake. It involved getting farther away from the top piton and higher above the gully floor, so I explained that there weren't enough holds to use. Morgan, quite unsympathetically, proceeded to use this route, and standing on the last hold, partially supported by the pull of the rope through the top piton, he drove in another. But here he ran into difficulty. Being only five-feet-eleven, the stretch to the next hold was beyond his reach. So back I went, six-feet-one and all, with the correct combination freshly in mind. Precisely how or why, I don't recall, but I was soon on the ledge. I do remember, however, a bit of delicate maneuvering, where an extra pound of pressure in the wrong direction would have meant starting all over. The ledge was treacherously covered with scree, narrow, sloping out and down, and devoid of piton cracks for twenty feet, so that success left me feeling no more secure. Driving a star drill (a rock-climber's knapsack has everything) in to the hilt in scree for what security it might offer, I crawled up these twenty feet, placed a piton, and Torcom followed as second man. Proceeding up the ledge to a point level with the top of the chockstone, I was trying to discover a route across the intervening blank wall when the most alarming of rock-climbers' cries, "rock!" rent the air. I was not particularly alarmed by the cry, since it was mine; but it was disconcerting to watch a five-pound missile bound towards us in long, hissing *ricochets* from the walls, with no good chance to dodge. After it had struck the face six feet in front of me and had glanced on to skim over Morg, he and I assured Torc that this was nothing at all — that the summer before on Glacier Point many rocks passed us at so high a velocity we couldn't see them, and had only a *crescendo* and *dimuendo* as a clue to their proximity.

Of course no one who passes an afternoon in a long chute that has been carved by rock and snow avalanches should be surprised to hear a falling rock now and then. There is a very definite objective danger. But we had weighed our chances carefully. Yosemite granite is particularly massive and sound, and I knew, from having lived more than two years in the Valley, that rock-falls on the north side were rare even in winter. We accordingly felt even now that

the chances of surviving objective hazards were better than those of avoiding automobile accidents, and I continued to lead. Piton No. 9, placed as high as I could reach above the ledge, permitted a rope traverse across the blank face, and with a final jump I was on the spacious roof of the chockstone.

To pass away the time while waiting for me to decide where to go, Torcom had been salvaging pitons from the route, for we still did not know what was ahead, and were particularly anxious not to run short of safety equipment. Consequently, by the time Torcom reached the top of the chockstone it was no longer possible to protect Morgan with an upper belay along our route, nor was there anyone left to give him the shoulder-stand necessary to start the pitch. So we dropped two ropes, one to belay him as he climbed the other hand-over-hand. With the belayer supplying some additional pull the scheme worked admirably, and Morgan was up the 25-foot overhang in just about ten seconds.

So engaged with the first chockstone had we been that we failed to notice the shadows on the Valley floor, which were becoming ominously long. Not being anxious to spend the night searching for the route with flashlights, we began to climb with all speed, calling upon every technique that would serve to put our climbing team out on top before dark. Morgan took the lead up under the second chockstone, and showered us with dirt as he cleaned off a route for a traverse over its edge. Changing the lead whenever it saved time, giving the second and third men an occasional tug with the rope if they lagged, standing in pools of water, or slithering on granite wet by the rill we had so prematurely blessed at noon, we hurried on. A third chockstone was conquered with the aid of a four-sided chimney behind it; long slabs of forty-five degree granite were ascended with varying forms of cross-pressure. We could now see by the serration of the tops of the walls that we were near the end. But still all was not well. Although at times tempting, the walls were still quite inaccessible, and ahead we could hear the persistent drip of a tiny waterfall formed by our little rill. In the deep shadow it was not possible to know just what we were up against, but we knew the ascent of a waterfall, however small, is likely to be complicated.

With wet tennis shoes, Morgan traversed from the security of a three-sided chimney from which Torcom belayed him, around a



polished nose into an open, two-sided affair, the sides of which were polished, rounded, at angles of approximately one hundred-twenty degrees to each other and forty-five to fifty degrees from vertical. Somehow he found sufficient cross-pressure to supplement the few minute holds, and advanced steadily to the source of the drip, a full twenty feet above us. Piton No. 10 went into place on the left wall, and he traversed diagonally upward to his right. There was thrilling suspense for a moment as he paused at the brink of the "waterfall," cautioning us to be ready for a fall, then very deliberately pulled himself up, settling into belay position. From our comfortable spot below, Torcom and I had spoken all the encouragement we could, which is the least the supporting party can do for its leader; but it wasn't until we climbed the pitch with an upper belay that we realized how much more encouragement Morgan deserved. Coming up as third man I couldn't discover how he led the pitch, and still don't know. While I prefer to think it was because we were hurried and I was carrying the pack, I nevertheless had to use that forbidden handhold — the rope.

Eleven hours of roped climbing were over. The gully opened out into a ravine, then into a rocky basin. Soon we were in the open, out among the Jeffrey pines and manzanita, with soft, friendly soil to walk upon. Below to the west Yosemite Creek, in full flood, rushed down its hanging valley, obscured in the shadows of dusk. Across it was the trail we wanted, and although we knew that it was inaccessible because the bridge was out, we were not troubled. For with the remnants of the Indian Canyon Trail, the intervening thickets of chaparral and the rockslides of "big-jump" talus, we knew we could somehow reconstruct a way down to the Valley — covering in a day the newest and oldest of north-wall routes.

We struck off for the head of the Canyon, with the freshness of High Sierra springtime in the cool air, the music of falling water interrupted by an occasionally spirited yodel, our shadows, cast by the rising moon, on the pine needles and snowbanks underfoot.

## THE LAND OF THE NAVAJO

BY HAROLD AXTELL



IT is something of a surprise in these modern days to find within the borders of the United States an extensive unexplored area into which archæological expeditions are still being made, and even more surprising to find that it lies within the orbit of our ordinary camping trips. Such, however, is the great plateau country, the Land of the Navajo, which lies in the northeastern part of Arizona and just across the border into Utah.

Although Rainbow Bridge had been visited by parties of the Southern California Chapter of the Sierra Club, it was not until last September that a party was organized to penetrate farther into the Navajo Country. Following a 16-day itinerary, announced in the schedule as "Navajo Desert Trip," a group of ten from the Southern California Chapter met September 18, 1938, at Desert View, on the South Rim of the Grand Canyon. Proceeding via Cameron, Tuba City, and Tonalea, to Shanto Canyon, camp was made on the bluff above the Trading Post at Shanto, and the first day spent in exploring Betatakin, a large cliff dwelling.

Rainbow Natural Bridge was the next point of interest. Reached over a 15-mile trail from Rainbow Lodge, this greatest of all natural bridges is surrounded by magnificent canyon country. After the first night at Bridge Camp, the main body of the party spent the second day in the vicinity of graceful Tsa-nun-na-ah (Rock goes across), then moved back six miles to the second night's camp in Cliff Canyon, near the foot of Red Bud Pass and a short distance from Forbidding Canyon. To John Wetherill, who discovered Rainbow Bridge in 1909, goes also the credit for finding the only feasible route for a trail. The Bernheimer Expedition of 1921, failing in its attempt to reach the Bridge by way of Forbidding Canyon, succeeded the next year in blasting this trail through a cleft in the north wall of Cliff Canyon, naming it Red Bud Pass after the many trees found in the canyon. An additional six miles, equally spectacular, brings one to the Colorado River. This trip was included in the second day's explorations by three members of the party.

In the opinion of many, Monument Valley ranks with Rainbow

Bridge, Canyon Chelly, and Grand Canyon among the outstanding scenic features of the Southwest. A comparatively good road runs northeast from Tonalea to Kayenta, said to be the most remote post office in the United States; thence through Monument Valley into Utah. At Gouldings Trading Post, in the heart of the valley, we established headquarters for several days of exploration. The Gouldings and their trading post are points of interest in themselves. They have made friends of the many Navajos living in the valley. And they have built roads to various points of interest, which make it comparatively easy to visit remote parts of the valley which were formerly accessible only by pack train, opening up opportunities for further exploration in a region where there are legends of great natural bridges yet to be named, and ancient ruins still undiscovered. Another attraction at Gouldings is the sunrise. Always a marvelous experience in the desert, here at Gouldings, high on a shelf at the base of a thousand-foot monument, it is an event of unusual splendor. The desert, spread out below, stretches away into the north and east like the ocean, broken only by little islands of grotesque figures, which are, in fact, immense sandstone monoliths. Set on perfectly proportioned bases of talus, their vertical walls rise a thousand feet above the desert floor and terminate in weird and fantastic spires. As the first narrow shafts of morning light break over the monuments, their sharp outlines are diffused. One is impressed with a strong sense of weird unreality, as in a dream one might behold the graveyard of the gods. And, again, at sunset, words cannot describe the incredibly brilliant scene of crimson and gold fading into pastel shades of old-rose and lavender.

The first day of exploration from Gouldings was spent in investigation of the Goosenecks of the San Juan at the northern edge of Monument Valley. Here, the San Juan River has created a most remarkable feature. The river seems to have lost itself in a series of convolutions in a gorge 1400 feet deep, through which it flows for seven miles to accomplish a mile of progress. The center loop is over three miles around, but only 300 feet from water to water at the narrowest point. The whole panorama produces the effect of a series of five parallel rivers. Descent to the river, an enticing possibility for future exploration, appears feasible by several routes, not to be accomplished, however, without some interesting rock work.

Another memorable day was spent in making a more intimate

acquaintance with the great monuments — the Totem Pole, whose slender 800-foot shaft of brilliant red sandstone contrasts sharply with the rippled sand-dunes at its feet; "Altars of the Infinite," where time and space have no meaning; fascinating Tsa-be-geh (Hole-in-Rock), a region of arches and domes, delightful valleys, and an echo-cave where seven distinct echoes can be heard. The high point of the day, however, and to some, the high point of the entire trip, came in an afternoon visit to a Navajo summer-hogan. Ushered in by Morse Knee, our guide from Gouldings, we silently found seats on sheepskins spread on the ground, faced our hosts, and hoped the sheepskins were not too plentifully inhabited. It is proper Navajo etiquette not to speak when first entering another's hogan, so no word was uttered, and we sat for perhaps ten minutes silently staring at one another. The summer-hogan is constructed of rough tree-limbs lashed together, after the manner of a Spanish *ramada*, and covered with brush. Strings of fresh meat were hanging from a ridge-pole. A remnant of an old cast-iron cooking-stove, which did service in the center fireplace, cast a discordant note over an otherwise primitive Indian scene. Sitting near the door, an old woman was industriously carding wool to be used in rug weaving. Every Navajo is a sheep owner and thus obtains wool which his wife and daughters weave into rugs to be traded for white-man's goods. Sitting at primitive looms, two young Navajo girls went on with their weaving, while in a prim row with their grandmother several wide-eyed youngsters sat silently watching their visitors. Our visit over, we presented our hosts with canned goods and candy, "payment" for the scenes we were taking away with us in memory. The women and children consented to pose for pictures in front of the hogan, for which small donations of silver were expected. The Navajo feels that the photographer takes something away and a token must be given in return, no matter what or how little. The Navajo leads a pastoral life, living with his family in his hogan, a world to himself. He is happy in the land of his ancestors, and is satisfied to be left alone in what would appear to many to be a meager existence. The Navajo is proud of his ancient heritage and is said to consider his tribe well above all others, rating the Hopi next, with the Piute at the bottom of the list — the white man is somewhere below the Piute. He is friendly when approached in an attitude of friendliness, and his hospitality is unmatched.

With a regretful farewell to Monument Valley, we returned to Kayenta, where we spent a memorable evening at the home of John Wetherill and Mrs. Wetherill. John Wetherill, now custodian of Navajo National Monument, is a pioneer and explorer of world-wide fame, yet unassuming as he is picturesque. Discoverer of Rainbow Bridge and many of the important cliff dwellings of the region, he is referred to by Neil M. Judd, leader of the National Geographic Society's 1924 San Juan Expedition, as "guide extraordinary and master of the whole plateau country."

Canyon Chelly, the last major objective of the 1938 trip, next received our attention. A southeasterly journey along Black Mesa, uneventful except for one particularly tenacious mud-hole, brought us to Chin Lee, gateway to the canyon of De Chelly and Del Muerto. Custodian Johnwill Faris was expecting us and promptly upon our arrival he grouped us in two cars and led the way in his specially-tired truck into the beautiful, treacherous Canyon Chelly. Often described as the most brilliantly colored canyon of the Southwest, its appearance was unique in the experience of our party. The walls, vertical and sometimes overhanging, rise sheer from the flat, sandy bottom of the gorge to heights of from 800 to 1000 feet. The talus slopes usually found in such places are lacking, and, instead, a smooth sand-floor extends from wall to wall. Many brilliant photographs can be seen high on the walls. Every cave of any size contains ruins of varying extent. The best known of these is White House Ruin, which derives its name from a whitish plaster used on the interior and now exposed by crumbling of the outer walls. The date of construction of this dwelling, determined from tree-ring studies of its timbers, is prior to 1060 A. D.

Branching northward from Canyon Chelly is the forbidding Canyon Muerto. Because it is too dangerous for ordinary automobile travel we were obliged to enter it from the north rim at a point some fourteen miles above its mouth. Following a Navajo guide, we descended an ancient Indian path known as Twin Trails, and walked about five miles farther up the canyon to Mummy Cave. The well-preserved cliff-dwelling located in this cave contains about eighty rooms and at one point is three stories in height. This tower, with its original floor and roof timbers still in place, was an object of great interest. The cave derives its name from a large number of mummies, some as well preserved as those of the Egyptian

pharaohs, which were found in 1923, in the debris below the cave, by an expedition of the American Museum of Natural History of New York. A large number of turquoise-mosaic ornaments of great archaeological value were found buried with the mummies.

A tragic episode is responsible for the naming of *del Muerto*. The scene of this drama of long ago is Massacre Cave, high up on the canyon wall and a little over a mile above Mummy Cave. About the year 1804, so the story goes, the women and children of a band of Navajos were placed in this ledge cave where they could not be seen from the canyon, while the warriors were away. Not long afterwards, a party of Mexican soldiers, mortal enemies of the Navajo, rode up the canyon. They had almost passed the cave, when an old woman who had been a captive of the Mexicans in her girlhood and knew their language, called down to taunt them, calling them "men who walked without seeing." Thus apprised of the hiding place, the Mexicans sent some of their party by a roundabout route to a rocky promontory overlooking the cave, whence their bullets, deflected by the curving walls of the cave, killed or wounded most of the occupants. The main party then climbed to the cave and completed the massacre with their rifle butts. In celebration of their deed, they named the canyon *del Muerto*, The Canyon of Death. Few Navajos today will approach the cave, and, even after these many years, the bullet marks may be seen upon the walls, while within the cave hundreds of human bones and parts of skeletons lie bleaching in the dust where they fell 135 years ago.

Although not included in the original itinerary, a side trip of forty-five miles, north to Lukachukai Mountain, turned out to be one of its principal features. This 10,000-foot, heavily wooded group of mountains dominates a region of brilliant cliffs, containing arches and caves of great archaeological interest. From its summit can be seen Shiprock, and, across "Four Corners" (where four state boundaries meet at right angles), the isolated mass of Mesa Verde, while to the west, the great monoliths of Monument Valley are visible. Even more thrilling, however, than extensive views were the groves of aspens, which, touched by the first frosts of autumn, had become a fairyland of color. This unspoiled region, as yet unmarred by roads, and with but few trails, offers an irresistible invitation to explore its richly forested slopes and to enjoy its delightful camp sites.

The homeward itinerary brought the party through the villages of Walpi, Mashongnovi, and Oraibi, where the Hopis make their homes in pueblos built high up on narrow mesas, contrasting sharply with the Navajo way of life. Walpi and Old Oraibi are said to be the oldest continuously inhabited towns in the United States, their earliest dates, established by tree-ring studies, going back to the year 1400.

This trip of sixteen days unfolded to us the vast opportunities for exploration and enjoyment in this region of desert and mountain, of archaeological riches and present-day Indian culture, and it is hoped that our Navajo Desert Trip will be the forerunner of many Sierra Club ventures into unnamed and perhaps still undiscovered corners of the enchanting plateau country — the Land of the Navajo.

## TRAILING THE FORTY-NINERS THROUGH DEATH VALLEY\*

BY CARL I. WHEAT



DEATH Valley has long attracted more than its apparently fair share of public attention. For half a century the Sunday supplements have dwelt upon its fearsome and fantastic qualities — telling and retelling, with many a lurid detail, the stories of the “Gunsight Lead”; of Twenty-mule-team borax wagons; of “Death Valley Scotty” and his fabulous diggings; of record-breaking heat; of prospectors lured to horrid deaths on its salty *playas*, and of the privations of the pioneers who first braved its arid depths. The facts that this valley is in many respects less cruel, even in summer, than are the deserts which surround it; that it offers many more water-holes and springs to succor the thirsty traveler than do most of those surrounding regions, and that it is one of the most arrestingly beautiful of desert areas, possessing a truly magnificent winter climate, have until recently been largely obscured in the public mind by these strange and oft-times all-to-colorful pictures, to which must be added the valley’s very name, which alone would have marked it for a certain amount of morbid popular attention.

Now, however, that Death Valley has been made a National Monument, under the direction of the National Park Service, it is rapidly becoming better known for its own sake. Roads have been built where yesterday not even trails existed; water-holes and springs have been cleaned out and made usable; new ones have been discovered; wells have been dug; camp-grounds have been developed; hotels have been erected, and today streams of visitors pour into the valley each winter through several gateways, while not a few venturesome souls enter its depths even in mid-summer — when legend has it that the sand becomes so hot that the very lizards find it necessary to turn over on their backs and wave their legs in the furnace-like air to cool their blistered toes.<sup>1†</sup>

Racing through Death Valley at fifty miles an hour over modern highways, and intent only upon a fleeting glimpse of the area’s fan-

<sup>†</sup> See notes on page 100.



tastic scenery, few of these present-day visitors give even a passing thought to the little band of weary emigrants who, without guide or trail, plodded down what is now known as Furnace Creek Wash just before Christmas in 'forty-nine — down, down, down into this tremendous desert sink — the first white men to cross its shimmering *playas*. Yet in all the West's kaleidoscopic background there exists no more fascinating chapter than that which concerns these luckless gold-seekers, who wandered into and across Death Valley seeking a short-cut to the California placers. Their tale was told, and told well, by William Lewis Manly, one of their number, in his "Death Valley in Forty-nine," first published in San Jose in 1894, the moving simplicity of his account lending an epic quality to this highly dramatic incident of the Gold Rush.

Manly was a remarkable character, and his narrative is replete with almost photographic description of the wild country through which the emigrant parties traveled. This faithfulness to geographic detail is the more notable by reason of the fact that Manly's account was written some forty years after the events which it describes.<sup>2</sup> When he trudged through Death Valley, thence with a single companion the three hundred miles out to the coastal settlements for help, back across the desert to aid the families waiting there below sea level, and finally with them once more out to the coast, there were no maps of this region, no names had yet been given to peaks or valleys or springs, and there existed no means of identifying natural phenomena save by description. Numerous attempts have been made to restate his route by reference to the after-acquired names of such phenomena, but since one desert canyon is much like another, and one water-hole may differ little from its fellows, every such attempt which has rested solely upon an examination of the modern maps has been doomed in advance to failure. This has also been true of the many hasty generalizations which have been made after hurried trips over the recently-constructed automobile roads of the area. Indeed, it has long been obvious to the informed student of this problem that only by *actual and personal experience on the ground* could such routes be even approximately ascertained.<sup>3</sup> Strangely enough, in view of the genuine and growing popular interest in this problem, no such attempt at actual exploration of the area for this purpose seems to have been undertaken until comparatively recent years.

During the winter of 1930-31, Dr. John E. Wolff, of Pasadena, spent some time in the mountains west of Death Valley on a geological reconnaissance, and shortly thereafter published a small pamphlet in which he announced certain views respecting a portion of these routes.<sup>4</sup> In more recent years, with the coöperation of Ernest Dawson, formerly President of the Sierra Club; of Superintendent T. R. Goodwin, Naturalist H. Donald Curry, and other officials of the Death Valley National Monument; of Dr. T. S. Palmer, of Washington, D. C. (who led the Department of Agriculture's expedition into Death Valley in 1891), and of numerous other interested persons, the present writer has given continued and detailed attention to these problems *on the ground*, following obscure portions of the various routes afoot, camping on the spots where the pioneers rested, and drinking of the springs which succored them. In addition, all the known accounts of the forty-niner parties have been brought together, and much ephemeral material — letters, newspaper items and the like — has been collected and examined. Certain conclusions resulting from this study are here outlined.<sup>5</sup>

At least a hundred emigrants were concerned in this "accidental" discovery and exploration of Death Valley during the winter of 1849-50. They were drawn from many widely-separated points of origin, and only a few had traveled together since the start of their westward trek. One thing they had in common — all arrived unseasonably late at Great Salt Lake, and all were deterred by Mormon warnings from pressing on across what is now the State of Nevada to what might well have been death in the snows of the Sierra. The memory of the Donner Party's fate in those same snows, then only three short winters past, was still fresh in every mind, and when Captain Jefferson Hunt, formerly of the Mormon "California Battalion," offered to guide them over the southern route to Los Angeles, they gladly agreed to pay him \$10.00 a wagon for his services.

At the rendezvous near Provo, Utah, the train of around one hundred wagons was "organized," rules and by-laws were adopted, leaders were elected for each of seven "divisions" and the party started hopefully south.<sup>6</sup> For a week or two all went well, but Captain Hunt soon proved somewhat hazy respecting certain portions of the route through southern Utah, and when he came back with "his tongue hanging out for thirst" after three days of advance scouting on the Escalante Desert, it seemed to many as if this might

be a case of the blind leading the blind. Much talk was heard among the more venturesome of breaking away from the train and seeking a short-cut to California through Walker Pass, a route which would apparently save at least five hundred miles of travel, and what seemed even more important to these gold-seekers — much valuable time at the diggings. This idea gained ground after the arrival of a party under the leadership of a certain "Captain" O. K. Smith, who claimed to possess a map drawn for him by an old trapper, one Barney Ward, purporting to show an easy route across the desert to Owens Lake and Walker Pass. By the end of October the defection had reached most of the company, and on November 4 all but seven wagons left Hunt and started west, following Smith's trail.<sup>7</sup> Hunt declared that he would go along if all went, but that as long as a single wagon elected to follow his original route south along the "Old Spanish Trail" to the Mojave River, Cajon Pass, and Los Angeles, he felt in duty bound to take that route.

This break-up occurred near the site of the present town of "Enterprise" in southwestern Utah, only a few miles north of the then as yet unnamed "Mountain Meadows," where eight years later occurred the notorious "massacre" of a party of Arkansas emigrants by Mormon emissaries. Before a week had passed, many of the seceders became discouraged at the dismal prospect<sup>8</sup> and turned back to Hunt's trail, which they followed, though not without considerable difficulty and some privation, across the desert and finally to the Southern California settlements.<sup>9</sup> But approximately a hundred former members of Hunt's wagon train persevered on the new and unknown route, and were soon groping their way through the rough canyon, mesa and desert region of southwestern Utah and southeastern Nevada. Before the first week had passed they were a thoroughly discouraged lot, but they plodded on from water-hole to water-hole, picturing each westerly appearing mountain range as the Sierra Nevada, beyond which must lie the California placers and untold riches for the taking.

No attempt will here be made to detail the routes or the experiences of these emigrants from the time they broke away from Captain Hunt early in November until they began to trickle down Furnace Creek Wash into Death Valley shortly before Christmas.<sup>10</sup> There were by this time a number of separate parties, traveling more or less independently. Among them may be mentioned the

"Jayhawkers," a group of more than thirty young men, mostly from the vicinity of Knoxville and Galesburg, Illinois; the family of the Reverend James Welch Brier, a Methodist minister of Iowa City, Iowa, consisting of himself, his wife, Julia, and their three sons, Columbus, John and Kirke, aged 9, 6 and 3, respectively; the Bennett and Arcane families, each containing small children, with whom were young Manly, already mentioned, and another youth, John Rogers, both acting as ox-drivers. There was also a group of men led by "Jim" Martin; a party of Mississippians headed by "Captain" Towne; several young fellows from Georgia; Henry Wade and his family; the Earhart brothers, one of whom was accompanied by his son, and finally a number of individual stragglers or small groups, who traveled now with one and now with another of the various parties, but whose names have in only a few instances been preserved.

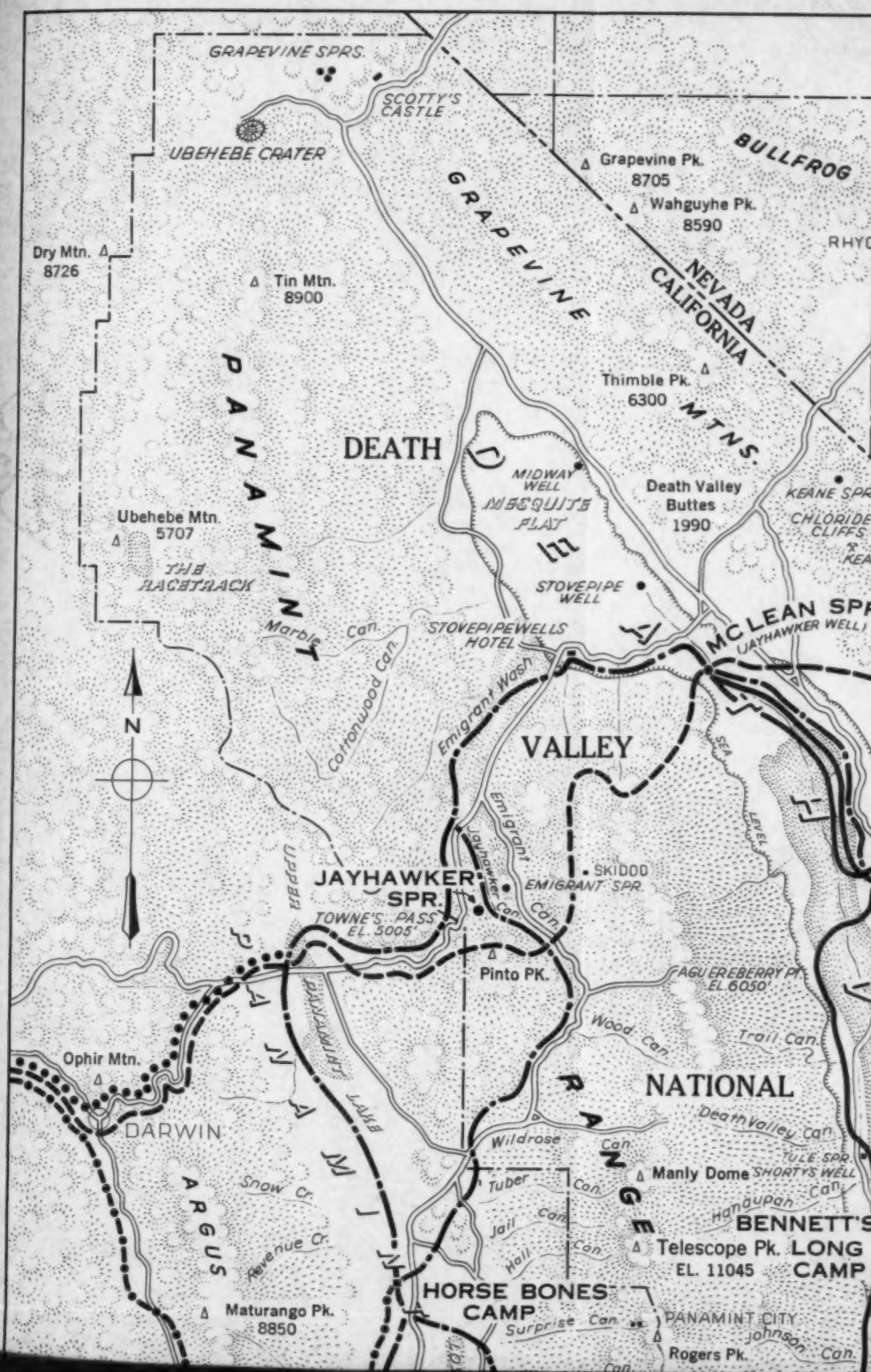
By the time they were nearing Death Valley the parties of single men — Georgians, "Mississippi Boys," and Jayhawkers — were leading the way. They skirted the northern and western reaches of the Amargosa Desert, followed by the Brier family. Most of them then turned south, along the eastern foothills of the Funeral Range, seeking an opening in these mountains which might enable them to reach what appeared to be a pass through a much higher range, just beyond. The Bennetts, Arcanes and Wades, and their companions, on the other hand, went south along the Amargosa's eastern rim, and crossed that desert from east to west in its approximate center, encountering the trail of the advance parties on the desert near the head of Furnace Creek Wash, only a few miles north of the present-day "Death Valley Junction."

According to his "Log," it was on December 22, 1849, that the group of Jayhawkers of which Sheldon Young was a member reached what is now known as the "Travertine Spring," only a short distance above the mouth of Furnace Creek Wash, and not far from the spot where today stands the palatial "Furnace Creek Inn," at the eastern gateway to Death Valley. Here was grass, and here was water in abundance, and the party spent the 23d resting near this welcome spring. The next day they descended to the mouth of the wash and entered the open valley. After attempting without success to cross the salt beds in the center of the valley, they turned north-west and camped, without grass or water, amid the mud hills, some

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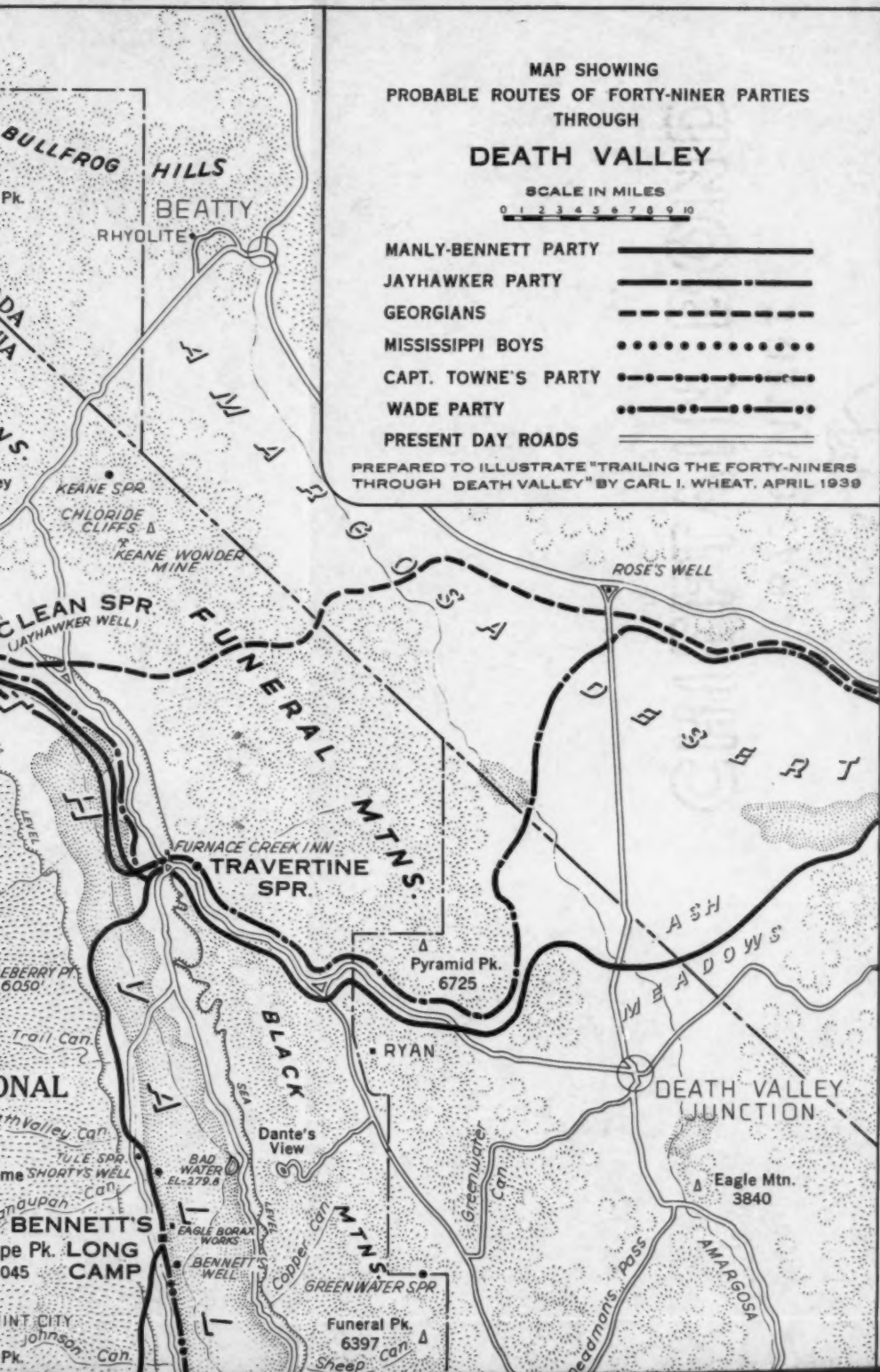


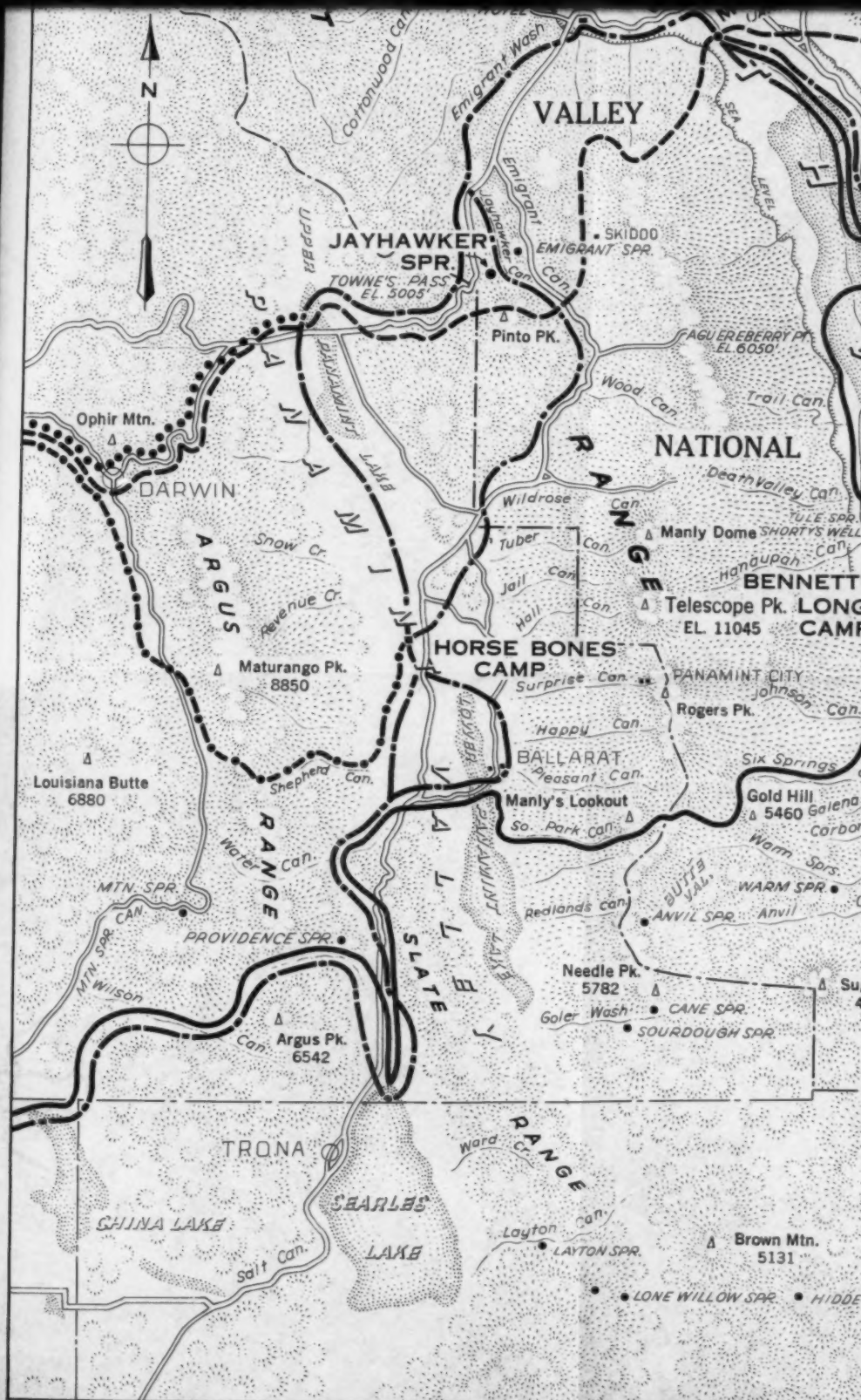
## DEATH VALLEY

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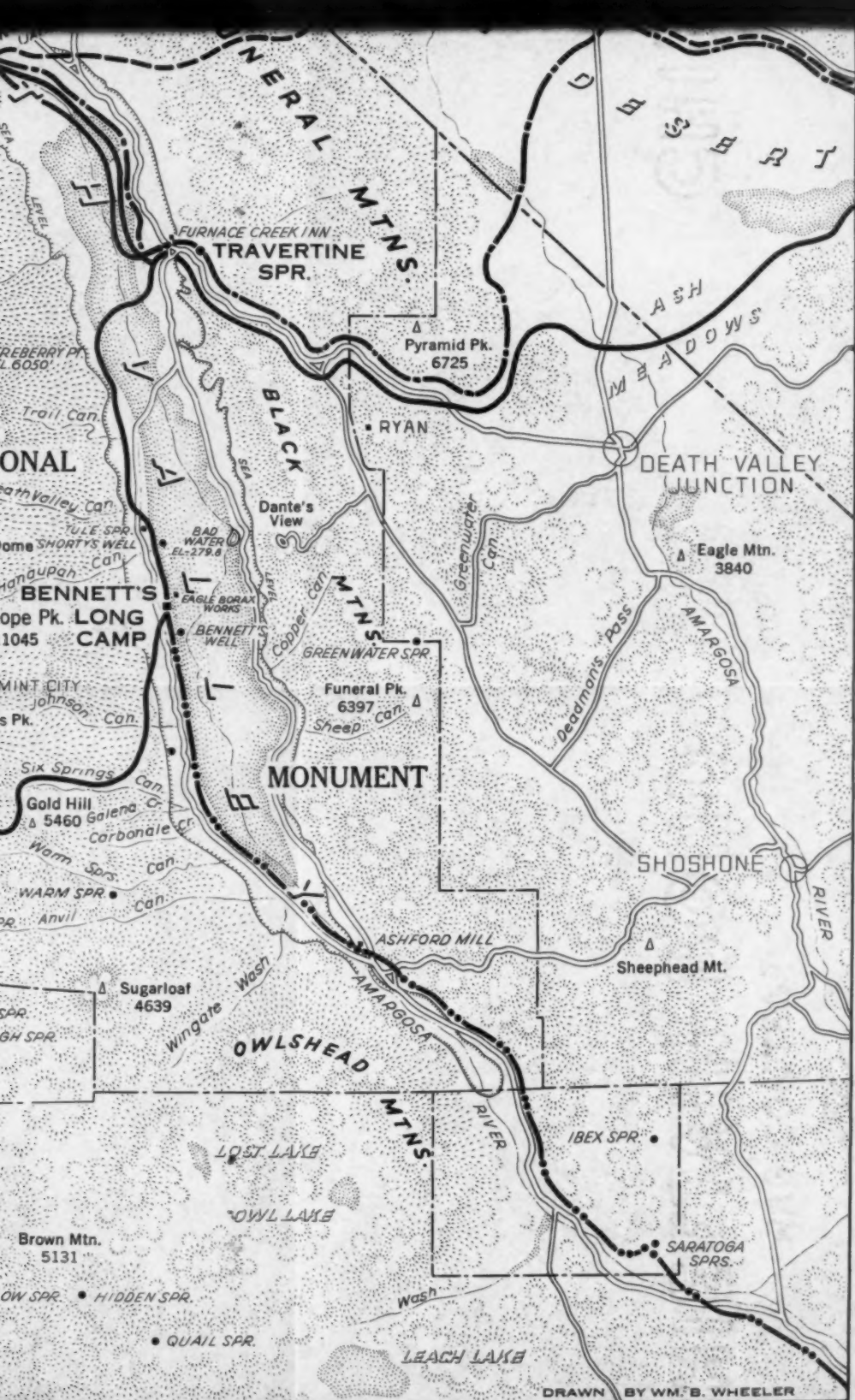
### PRESENT DAY ROADS

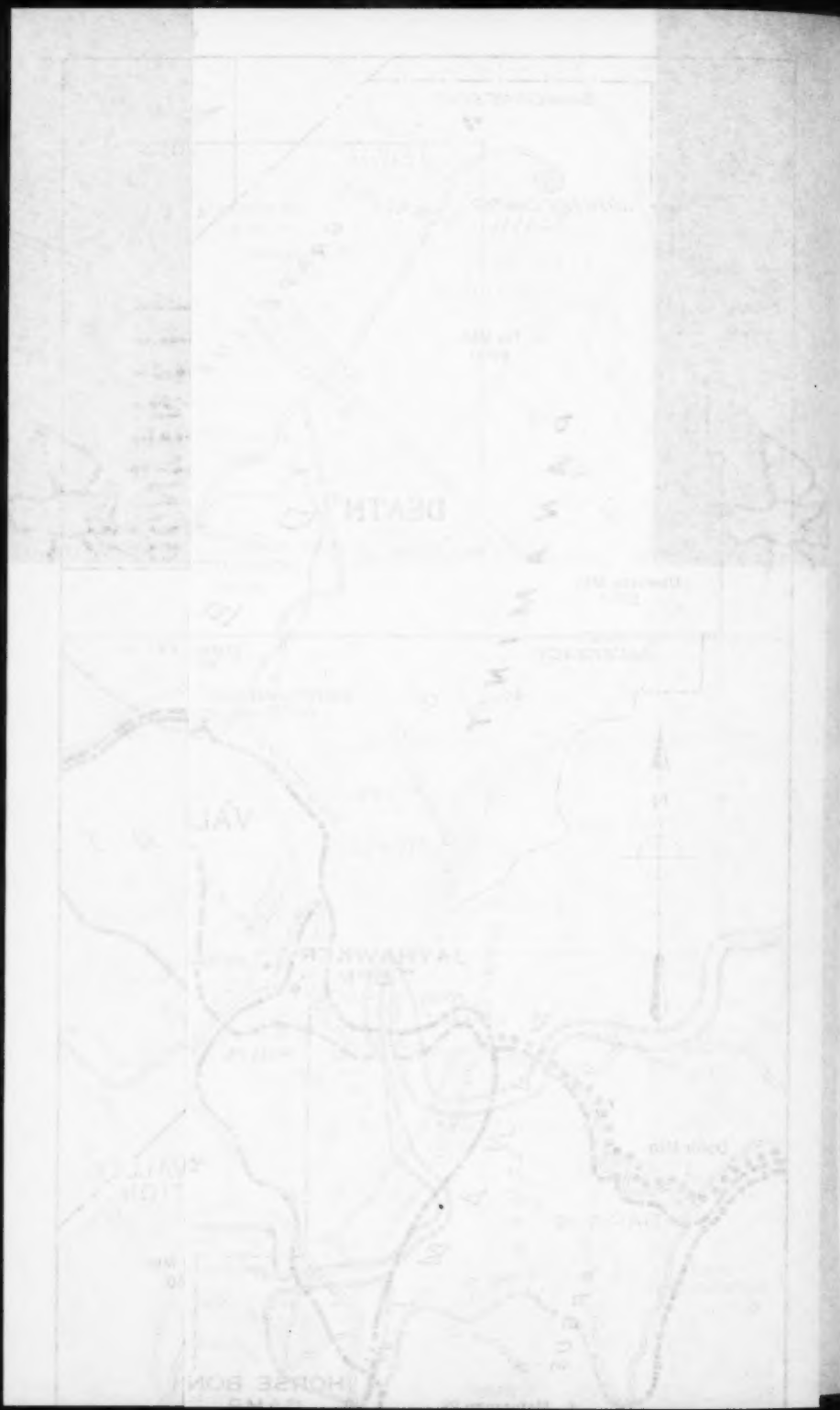
PREPARED TO ILLUSTRATE "TRAILING THE FORTY-NINERS  
THROUGH DEATH VALLEY" BY CARL I. WHEAT, APRIL 1939











four miles from the site of the Inn and probably in or near "Mustard Canyon," not far from the later site of the "Harmony Borax Works," whose ruins still stand along the desolate hill. On Christmas the group discovered water, probably flowing from the springs which now supply the National Park Headquarters, not far north of their camp, and that same day they apparently traveled eight miles farther northwest, seven miles being made after darkness had fallen. No celebration that year! On the 26th they moved eight miles on to the head of the salt *playa*, and finally camped four miles beyond this point, at a spot where they found grass and water. Here, on the 27th of December, they came to the conclusion that their only alternative was "to leave our wagons and carts and pack our oxen."<sup>11</sup>

On the day before Christmas, young Manly, as was his habit, went out ahead of the Bennett party to spy out the land. Toward night he reached the low pass leading from the Amargosa Desert into the upper reaches of Furnace Creek, and here he stumbled upon the dead body of one of the Jayhawker party's oxen. Forty years later he recalled the joy with which he cut off a poor, stringy steak from the starved animal's rump, eating it without salt and without even halting to cook it. Scrambling on over the desert "fans" and washes, and chewing his delicious morsel of ox meat as he went, he finally discovered a tiny "seep" of water under a cliff and made a lone camp amid the rocks, probably at what is today called "Naval Spring," the only water now available in upper Furnace Creek. The next morning Manly followed the wagon tracks of the earlier parties down the sandy wash until, toward night, he found the Reverend Brier solemnly lecturing on the advantages of education to his three sons and the two or three young gold-seekers who were traveling with his party, while little Mrs. Brier cooked a wretched bit of meat from a slaughtered ox and a biscuit or two for their Christmas dinner. Manly, who was blanketless, slept that night by the Brier's campfire, near the "Travertine Spring."

The next morning, after the Brier family had hastened on to overtake the Jayhawkers, Manly searched the camp, and in the evening of his life recorded with evident gusto the pleasure with which he chewed a few bacon rinds, found by him in the sand after the party had departed. He then turned back toward the Bennett's train, which he encountered a few miles up the wash, their oxen showing evident signs of impending collapse. The next morning,

while the Bennetts and their companions plodded on down to the spring, he returned to the mouth of the wash, where he found an old, dried up, but still living Indian ("a kind of Indian mummy")<sup>12</sup> near the otherwise deserted village that was located not far from the present "Furnace Creek Ranch."<sup>13</sup> Pressing on, following the trail of the advance parties, he turned north, around the sharp bluff on which the Inn is now located, and proceeded in a generally northwesterly direction across the comparatively easy country which lies along the base of the Funeral Range. After a detour to the salt-beds on the floor of the valley, he again struck the Jayhawkers' trail, and shortly after dark (his earlier account says "nine o'clock") reached the spot where Captain Edward Doty and his mess were encamped. Here the water was brackish, the food poor, and the men utterly discouraged. They were now convinced that the pass toward which for some time they had been heading, in a somewhat roundabout fashion, was "no pass at all," and when Manly found them they were burning their wagons, using the wood to dry ox meat, and were preparing to pack their food and a few belongings on the remaining oxen, as the Georgians and "Mississippi Boys" had been doing for some time.

This Jayhawker camp was located at a brackish water-hole near Salt Creek, known later as "McLean's Spring." It was somewhat east of the center of the valley and not far south of the present road between Daylight Pass and Stovepipe Wells Hotel.<sup>14</sup> Here, indeed, was a sorrowful camp, and that night, as Manly sat with the boys about the campfire, the Jayhawkers and their companions were at small pains to conceal their downheartedness. The Brier family was by that time camped nearby, and half a century later Mrs. Brier spoke with deep feeling of the despondency which seized them all at this last camp with the wagons.<sup>15</sup>

Behind them lay almost two months of desert travel since they had left Hunt's trail, and it had now become obvious that the high range of snowy mountains which towered above them to the west was not the hoped-for Sierra Nevada. Had they known the difficulties, privations, and — for some — death, which lay beyond this range, the rugged Panamints, their discouragements would have been all the more complete.

Manly spent the night of December 27 with Doty's mess and discussed the dubious prospect. The Jayhawkers were convinced

that the preferable route lay around the northerly bastions of the range, where the low gap which they had called "Martin's Pass" in honor of one of their companions had seemed to lie. But they had sent out scouting parties, and were also convinced that wagons could not be taken over the mountains which now confronted them. Looking up at that grim wall rising eight thousand feet above the camp, Manly was forced to agree.<sup>16</sup> Even the route which they now proposed to follow around to the north of the main range looked dubious. However, he had surveyed these mountains with care from the mouth of Furnace Creek Wash, and had noted how the higher ridges give way to much lower desert highlands a few miles south of the eleven thousand foot peak which dominates the center of the range, and which for many years has borne the name "Telescope Peak." His chief desire was to find a pass traversable by wagons, and since a northerly attack on the Panamints now seemed to all to be feasible only with pack animals, he determined to advise the Bennett party to adopt the more southerly route.

The next day (December 28) the party of young Georgians (called by Sheldon Young the "Bug-Smashers") arrived in the Jayhawker camp, determined upon a desperate venture.<sup>17</sup> Having dried all the ox meat they could carry on their backs, they gave the Briers their remaining oxen, shouldered their packs, and on the morning of the 29th headed due west in a final effort to escape afoot. Apparently they crossed the lofty ridge of the Panamints over the shoulder of Tucki Mountain, probably going up from Death Valley by some one of the several canyons that here pierce the range. Such a route would have led them over the rough, bare highlands where, a half-century later, the mining camp of "Skidoo" was located. Thence they seem to have kept in the high country until they reached a point near what was later to be known as "Towne's Pass."

What may have been the ultimate fate of this group of young gold-seekers has always been somewhat of a mystery, for apparently they have left no written or printed record of their adventures. It has been said that they were successful in escaping from Death Valley, only to lose their lives in an Indian fight on the Chowchilla River, from which but two are reported to have escaped. Another story has it that they were frozen to death while still on the desert. Be this as it may, they started that day from the brackish spring on Salt Creek, and at least reached the spot later to be named

"Towne's Pass," for only recently it has been learned that, after these various groups had all passed out of Death Valley, the Indians, who were following them to pick up what belongings might be left behind, discovered the body of a white man at a deserted camp near that pass, lying in a pile of rocks *with a broken leg and a bullet hole through his forehead*. When this nameless young gold-seeker broke his leg he could walk no farther. His comrades could not carry him out through that wild region, yet move on they must and at once, or all would perish. Not even a dog would have been left by his friends to die there alone among the rocks. "A bullet hole through his forehead!" Poor fellow! Thus tragically the Georgians pass from the scene.

Meanwhile Manly, who had risen before daylight on the morning of the 28th, turned back toward Furnace Creek and the Bennett party. About noon that day he passed Messrs. Fish and Gould, two older men, who, with "Captain" Culverwell, an ex-seafaring man, had for some time been traveling with the Bennetts, but who had now decided to try their luck on foot with the Jayhawkers. Manly bade them farewell with no little foreboding, and it was "almost night" when he arrived at Bennett's camp near the Trever-tine Spring to make his report. He found his party almost as despondent and discouraged as had been the groups which he had been visiting, but after hearing him it was agreed by all that they should strike to the south and there, if possible, surmount the massive barrier now stretching before them.

Next morning the Bennett party started on once more — out past the mouth of Furnace Creek, thence south for a short distance across its rocky alluvial fan, then due west through the clumps of mesquite that still grow near Furnace Creek Ranch, and finally across the great salt beds and tiny Salt Creek, near the present "Blackwater Spring Crossing" (also known as "Corduroy Crossing") to a dry camp on the west side of Death Valley. After another day's travel they found "a good spring of fresh water coming from the bottom of the snow peak almost over our heads," and there — probably either at what is now known as "Tule Spring" or at the surface water where later stood the "Eagle Borax Works" — they camped.<sup>18</sup> Due west rose snow-capped Telescope Peak, while the great Hanaupah Canyon spewed its giant alluvial fan out into the valley almost to the party's camp.



Next morning four single men of the party left afoot to join the Jayhawkers, carrying only some dried ox meat. Two of them (Silas Helmer and S. S. Abbott) had been serving as ox-drivers for Bennett, while the other two (whose names have not been recorded) had acted in the same capacity for Arcane. Manly still maintained his opinion that the southern route around the Panamints was preferable to the route selected by the Jayhawkers, and that day the party headed up the rough alluvial slope toward a canyon "leading up west to the summit of the range." Manly says it was "perhaps eight miles" from the spring to this canyon, and that they camped that night at its mouth near a small sulphur spring. While "Shorty's Well," one of the springs a short distance from the Eagle Borax Works site, is at times found to be slightly sulphurous, no such spring has yet been found near the mouth (*i. e.*, at the upper edge of the open alluvial fan) of any of the canyons along the west side of the valley.<sup>19</sup> Moreover, if the main camp was in fact at either Tule Spring or the Eagle Borax site, the distance to the "mouth" of the nearest canyon which could well later have been the party's route of escape is much more than eight miles.<sup>20</sup> That distance would approximate the mileage to the mouth of "Johnson Canyon," in which the Indian settlement of "Hungry Bill's Ranch" is located. But that canyon, though now passable for animals, may not have been so passable in 1849, and it apparently heads far too high in the range to have been the Bennett party's avenue of exit from Death Valley. Doubtless, in retrospect, Manly either underestimated the distance, or the base camp was farther south than seems otherwise probable, for the canyon in question can hardly have been other than "Six Springs Canyon," the first canyon, going south, which heads in a pass or gap visible from the valley floor.<sup>21</sup>

Early the next morning Manly set out to explore the upper reaches of the canyon, and was not long in discovering that it was impassable for wagons. He climbed "an elevation" from which to survey the neighborhood, seeing only low desert mountains to the south, and then returned to the ox-teams to report the disheartening news that the party must turn back. He records that it was "nearly dark" (his earlier account says "near midnight") when he encountered his companions, and that, after passing a night in the canyon, they turned back. One of Bennett's oxen gave out before long, as did one belonging to Mr. Arcane, and it was apparent that some

desperate remedy must now be adopted if any of the party were to escape alive.

That night a solemn consultation was held, and it was finally determined that Manly and the young Tennessean, John Rogers, should go out to the settlements for aid. Mr. Bennett felt that it would surely not take them more than a week, or at the most ten days, for the trip, and it was proposed that the remainder of the party should await the return of the emissaries at the "good spring" they had recently left. At this time the group consisted, in addition to Manly and Rogers, of Mr. and Mrs. Bennett and their three small children; Mr. and Mrs. Arcane and their young son; the two Earhart brothers with one of whom was a grown son; old "Captain" Culverwell; three other grown persons whose names have apparently not been recorded, and the Wade family with four children.<sup>22</sup>

The next morning "the boys," William Lewis Manly and John Rogers, "silently turned away," much affected by their leave-taking, and headed up the canyon which the wagons had descended the night before. They carried packs in which most of the dried meat of one of Mr. Arcane's poor, half-starved oxen had been placed, and Manly took along Bennett's "seven-shooter rifle," while Rogers carried his own shotgun. They had half of a light blanket between them, and at the last minute "a couple of spoonsful of rice and about as much tea" were added from the meager store of food in the wagons.

"After awhile," says Manly, "we looked back and when they saw us turn around, all the hats and bonnets waved us a final parting." But "we soon passed round a bend of the canyon, and then walked on in silence."<sup>23</sup>

The route up the canyon was rough, but the boys noted that it would be passable for oxen. Toward night they came upon some small seeps of water, the "Six Springs" from which the canyon takes its name. This canyon heads in a wide and comparatively flat basin, now inhabited by a magnificent herd of wild burros.<sup>24</sup> To the west rises the main wall of the Panamints, almost two thousand feet of steep, rough slopes apparently negotiable by man but hardly feasible for pack animals. To the south rises a rocky shoulder of the range, pushing out toward Death Valley and now known as "Gold Hill"—possibly the very "elevation" from which Manly had surveyed the region two days previously.<sup>25</sup>



Between Gold Hill and the high western wall, however, lies a low gap to the south of the head of Six Springs Canyon. This gap, which is easily traversable by animals, leads southwesterly around the higher ridges until it opens into a wide, almost flat, desert valley sloping southerly from the main ridge and now known as "Butte Valley" because of the remarkable, isolated, striped butte which stands near its western boundary.<sup>26</sup> Through this low gap, without doubt, Manly and Rogers found their way out of the head of Six Springs Canyon and into the eastern edge of Butte Valley.

Here several possible courses lay open to the pair. They could make their way westerly across this comparatively easy valley; they could strike southwesterly into the welter of desert highlands that lie between it and the sandy levels of "Wingate Pass" (more accurately known as "Windy Gap"), or they could seek the higher ground on their right, where the lofty ridges of the Panamint range rim Butte Valley along its northern boundary. Water was, of course, their main objective, and Manly, as a veteran plainsman and by now fairly experienced in the ways of the desert, knew that safety in this regard lay most surely in keeping to the higher ground. In so doing, it is probable that he and Rogers passed near the small water-hole in the northeastern corner of Butte Valley known as "Arrastre Spring" (though they may not actually have seen it), and then continued "contour fashion" up an easy slope to the high divide beyond which Pleasant Canyon, coming up from the west, heads in the broad, pinyon-covered basin of "Mormon Gulch." They noted that this gradient would be easily traversable by animals, and then climbed upon a nearby eminence to survey the land.<sup>27</sup> Manly's description of what they saw, as he wrote it in 1888, is worth quoting:

"We could see more than 150 miles to the west and north and but 60 or 70 miles before us was the highest, broadest, biggest mountain we had ever seen, covered deep with snow, and beyond were white peaks beyond peaks as far as the eye could see.

"We now stood and looked some time at the grand picture before us, and wondered if such a mountain would hold its snow all the year. The high mountain glittering and gleaming in the morning sunlight and the lesser peaks clothed in dazzling crystal was the grandest and sublimest sight we had ever seen. In strange contrast to this in the west and south were dark low barren mountains devoid of snow and without any signs

of timber, grass or water; they had the appearance of a barren, desolate region; but in the very far south and west we could see a range that seemed to have some snow on its highest peaks, but it was very dim. A long way off the snow mountain seemed to drop off suddenly into an almost level plain and the mountains in the distance seemed to start out on its most western spur."

In April, 1936, the writer, with Ernest Dawson and a party of friends, stood on a rounded, pinyon-covered eminence at the summit of the Panamint Range, just south of the head of Pleasant Canyon, and overlooking Butte Valley still farther to the south. It was a magnificently clear day, and the ridge of the Sierra Nevada, glistening in its snow-cap, dominated the western horizon, while the nearer Slate and Argus ranges rose dark and barren, just as Manly so ably described the scene. Far to the south and southwest rose the snow-capped summits of Mounts San Geronio and San Antonio, dim but plainly visible across the Mojave Desert. To the east lay Death Valley, so deep as to be only partially visible, while in the distance rose the Black Mountains and far away the gleaming peaks of the Charleston Range. To the north Telescope Peak raised its majestic, snow-capped summit far above the party's vantage point, and the group lingered for a long time surveying the magnificent panorama.

Here, nearly eight thousand feet above the floor of Death Valley, was apparently the spot where Manly and Rogers stood that morning, early in January, 1850, gazing out at the breath-taking but dismal prospect before them. And to this rocky, pinyon-dotted eminence was given the name "Manly's Lookout."

One glance at what was ahead and the two young men realized that Bennett's estimate of a week or ten days for their trip to the settlements and back was grievously in error. If it were not to occupy twice that time, they would be doing well. Indeed, they felt that they would be fortunate to make it out across that desert alive. They therefore considered the various alternatives. Should they return and advise the party waiting at the spring in Death Valley of this unlooked-for prospect, or should they proceed on their journey? "These were very sad reflections," wrote Manly years afterward, "and we weighed the matter to the best of our ability and came to the conclusion that there was no other course for us to pursue than to go ahead live or die."

Go ahead they did. The course was now down hill, first by an easy grade through the cup-like mountain "sinks" or flats now known as "Middle Park" and "South Park," thence down the rugged western escarpment of the range to the Panamint Desert, the floor of which lay more than six thousand feet below their vantage point.<sup>28</sup> Manly later recalled that the mountainside was so precipitous that they were forced to "help each other down over the steep places." While it is possible that they descended by one of the canyons that pierce this rocky wall, it seems more than likely that they kept to some ridge, from which they could continue to survey the terrain which lay ahead. Exact identification of the route they followed that day from "Manly's Lookout" down to the floor of Panamint Valley is not possible, but it is clear that they reached the valley a few miles south of the spot where the roaring mining camp of "Ballarat" was later to stand.<sup>29</sup>

Here they were confronted with a lake—the south, or "wet playa," of Panamint Valley. To cross this in a direct westerly course was here impossible, and they turned north along its edge, suffering greatly from thirst.<sup>30</sup> Veering to the west not far from the site of Ballarat, the youths crossed the northern edge of the wet *playa*, on the approximate route of the present road between Ballarat and Trona, and then commenced the ascent of the Slate Range, near the point where it merges with the Argus Range to the west, probably dipping into Water Canyon, the mouth of which lies due west of the spot where the present highway descends to the north from the pass. Here, toward night, they discovered the tracks of members of the parties whom Manly had last seen at McLean's Spring burning their wagons just after Christmas.

We must now return to these parties—the Jayhawkers, the "Mississippi Boys," and the Briers—who were last noted in that dismal camp at McLean's Spring. There the water was brackish and the grass soon played out, necessitating an early start. It has already been noted that the Georgians apparently attacked the higher reaches of the range almost due west of the spring. The remainder of these emigrants now (December 30, 1849) swung across the floor of the valley and then veered to the north, past the sand dunes that lie in the "pocket" between the great northerly and southerly arms of Death Valley. Not far north of these dunes they turned west and commenced the ascent of the long, regular grade by

which the valley floor rises some six thousand feet from sea level around the northern escarpments of this portion of the Panamints. Just to the south rose Tucki Mountain, in whose fastnesses the mines which centered in the wild mining camp of "Skidoo" were later to be located. The route passed the present site of "Stovepipe Wells Hotel," and for a number of miles followed the approximate course of the State Highway which today leads over Towne's Pass to Darwin and Owens Valley.<sup>31</sup>

A branch of this modern road turns south around the westerly slopes of Tucki Mountain, thence up the canyon long known as "Emigrant Wash," past "Emigrant Spring," and thence over the rolling country of "Harrisburg Flat" into the middle reaches of Wildrose Canyon, where today the National Park Service has erected its summer headquarters for the Death Valley National Monument. Since no account was known to exist describing this portion of the Jayhawker route in the detailed manner in which Manly wrote his story of the Bennett party's escape, students of this problem have been relegated to conjecture in relation to this section of the route. And for many years it was assumed that the Jayhawkers and their companions made their way out of Death Valley by means of Emigrant Wash.

It has seemed quite puzzling, however, that neither the Jayhawker nor the Brier accounts, sketchy though they be, mentioned the large and remarkable spring now known as "Emigrant Spring," for had they passed it they could hardly have failed to recall its plenteous waters. Yet no word of such a spring is to be found in any of their accounts. Early in the summer of 1936, however, a remarkable discovery was made. One of the older Indians of the region, a Piute named Tom Wilson (who married the daughter of "Hungry Bill," long one of the chiefs of the Death Valley Shoshone Indian band), was pasturing a few horses in the wild country west of Emigrant Wash. Where they obtained water was a mystery until Wilson mentioned a small spring in an adjoining canyon. One day he piloted "Rocky" Cochran, Senior Foreman in the National Park Service (himself a full-blooded Cherokee Indian), and Farland Wells, a member of the Wildrose Canyon "C. C. C." Camp, to the spot.

The spring proved to be a minute affair, with a flow of but a few gallons daily — just enough for the Indian's small band of horses.

But below it, fallen from the lava caps which surmount the mountain high above, were two large, black lava boulders, and several smaller ones. On these, to their surprise, Tom Wilson's companions saw not only Indian pictographs but numerous names and initials, scratched into the "desert varnish" that encrusted their surface. Excitedly Wells made note of these names, and a few days later Messrs. Goodwin and Curry, of the National Park Service, visited the spot and photographed the rocks.

On one, in bold letters, were the initials "W. B. R." and the date "1849." Here, then, was the long-sought proof of the actual route of at least one of the Jayhawkers. For these were none other than the initials of William B. Roods, of the Jayhawker party, who in 1871 was drowned in the Colorado River near La Paz, Arizona. A few days later the present writer went to the Death Valley area to view and photograph the rock; and today the tiny spring is known as "Jayhawker Spring," and another desert mystery has been solved.<sup>32</sup>

The problem was now clear. From the long grade which the Jayhawkers, "Mississippi Boys," and Briers were ascending, the entrance to Emigrant Wash is blind and well-nigh undiscoverable. On the other hand, the mouth of the much smaller canyon in which the "Jayhawker Spring" is located opens wide to the valley. The party of which young Roods was a member apparently sought a means of egress through this opening in the surrounding mountains, and some two miles above the canyon's mouth found the small spring. While this group was camped here, probably on the last day of the year 1849, Roods scratched his initials on the lava boulder, which, with its companion rock in the valley nearby, thus forms a permanent and precious record of the Jayhawker visit.

It is probable, however, that another group of the Jayhawker party failed to find this spring, for a careful examination of the "Log" of Sheldon Young leads to the belief that the particular party of which he was a member kept on up the wide grade to the west, instead of turning off into the canyon to the south. This "Log" was presumably kept each day as the party progressed, and it is only on the assumption that Young's group crossed the ridge at or near Towne's Pass, and thence descended into upper Panamint Valley, that Young's courses and distances can apparently be reconciled with the geographical facts. He records that on December 30, 1849,

his group started from the spot where the wagons were left (McLean's Spring), going twelve miles to a dry camp, probably not far from the present site of Stovepipe Wells Hotel (to which water is still hauled by tank wagon). The next day the party traveled twenty-four miles west "to the top of a high mountain" (doubtless at or near the present Towne's Pass). The next day, January 1, 1850, they lay in camp at the summit, melting snow for themselves and their oxen, and on the second descended westerly eight miles. On the third of January another eight miles brought them to the flat floor of Panamint Valley, here "wholly destitute of grass," a good description of the upper, or northerly, Panamint *playa*. Here they found "greasewood" which served as "browse" for the cattle, and the next day they moved south ten miles, and on the fifth made twenty-four miles "South by East" to a second dry camp. (The roughness of the terrain in this portion of Panamint Valley may well account for any seeming overstatement of the distances thus traveled.) From this spot, on the sixth, they proceeded four miles east to an Indian camp where they lay over to rest and dry the meat of some of their oxen which had completely played out. On the eighth they went eight miles southeast to a spring (near Ballarat). Here they "lay in camp" for a day, with explorers out looking for a route, and on the tenth they traveled four miles across the Panamint Valley in a southwesterly direction, camping on the summit of the Slate Range, doubtless at a point not far from the spot where the present highway crosses the ridge toward Searles Lake Valley.

Whether the Briers and the "Mississippi Boys" followed the group of Jayhawkers of which Sheldon Young was a member over Towne's Pass into the upper Panamint Valley is not entirely clear. Many years later Mr. Brier wrote of a return trip made by him to Death Valley in 1873, and distinctly states that his family emerged from Death Valley by way of that pass, and that here the main body of the "Mississippi Boys" left by way of Darwin Canyon to "pack" out to the coast. However, certain descriptions written late in his life by John W. Brier (who was only six years old in 1849) may possibly relate to the Harrisburg Flat area, to reach which the party would doubtless have gone by way of the "Jayhawker Spring."<sup>33</sup>

After resting at that water-hole, the party of which Roods was a member climbed the low ridge near the head of the canyon in which the spring is located, and descended into the upper end of Emigrant

Wash, hardly a mile above Emigrant Spring, at the approximate location of what was later known as "Emigrant Cave," near which the small Journigan Mill is now engaged in ore reduction. This was below the point where the wash leads down from the broad, high plain now known as "Harrisburg Flat." There, many years later, "Shorty" Harris and his partner, "Pete" Aguerberry, located the celebrated "Harrisburg Mine," past which a road leads today out to the rough summit ridge of the Panamint Range at "Aguereberry Point," one of the major scenic spots of the National Monument, corresponding in grandeur of site and view to the better known "Dante's View" on the summit of the Black Mountains across Death Valley.

On Harrisburg Flat and the adjacent "White Sage Flat" the party found good feed for their animals, and quantities of snow, which they melted for drinking water.<sup>34</sup> The pass to the south, between the flat and the upper portions of Nemo Canyon, though over five thousand feet above the floor of Death Valley, is through rolling country, and after traversing it this group proceeded down Nemo Canyon, apparently missing the low gap which would have led them into Wildrose Canyon at a point just above its large spring, and only about a hundred yards below the National Park Service's summer headquarters. The present road from Emigrant Spring follows that route, but these Jayhawkers seem to have gone down Nemo Canyon to its mouth at the lower end of Wildrose Canyon, thus missing the spring and the water they again sorely needed.

Coming out on the flat floor of Panamint Valley, the group continued south, some in advance, some straggling far behind. Until recently it had been supposed that all these parties camped at the present "Indian Ranch," near the mouth of Hall Canyon on the east side of the valley, but this is now known not to have been the fact. Instead, they made their way southerly from the mouth of Wildrose Canyon to the great thicket of mesquite near the center of the broad desert valley, at this point nearly ten miles wide. Except for the main group of "Mississippi Boys" who had gone west up Darwin Wash, the parties that had crossed over Towne's Pass were already halted at this point.

Here the emigrants found water, a deserted Indian village,<sup>35</sup> and horse bones. It is difficult today to comprehend the thrill which this last discovery gave them. But to them horse bones meant white men,



and they pictured them as quite near. Doubtless the local Indians had been raiding the *ranchos* of Southern California for at least two generations, escaping with what horses they could steal and driving them out across the desert, where the whole tribe feasted on their delicious meat — a treat, indeed, for these desert denizens, accustomed only to pinyon nuts, rabbit steak and grasshopper stew, with an occasional mountain sheep when times were good.

The accounts written by members of the 1849 parties which passed this way speak feelingly of these horse bones. Here was a veritable oasis, and here they all camped to rest their oxen and to gain strength themselves. Here also, or at a similar camp a few miles farther south, occurred a dramatic incident, which will bear retelling.

It seems that "Captain" Towne and his four remaining "Mississippi Boys" were at this juncture still traveling with the Briers, on the back of one of whose oxen had been packed their small stock of flour — the last which remained among the entire party. While the rest of the emigrants rested under the mesquite bushes, Towne and Brier decided to explore the Argus Range to the west, to seek a way of exit. This range is high and barren, rising to nearly nine thousand feet at the summit of Maturango Peak. They tried several canyons, none of which seemed feasible to Brier, who kept on south until he discovered what appeared to him to be a way through, probably by way of what is now known as "Water Canyon." But Towne was impatient. He and his four remaining companions<sup>36</sup> were afoot; their oxen had all died or been killed for meat; he deemed it dangerous to wait longer, and he therefore determined to leave by one of the more northerly canyons, probably that which was later named "Shepherd Canyon," just south of Maturango Peak.<sup>37</sup> He therefore prepared to move without further delay.

Mrs. Brier offered to cook Towne's small stock of flour into biscuits for packing. While she was doing this, the senior Jayhawker, "Captain" Asa Haynes (then only forty-six years of age but deemed by the rest an "old man"), looked hungrily on, while the youngest member of that party, John B. Colton, then only eighteen, gathered wood for the fire, in evident hope that he might thus earn a mouthful of biscuit. At last, when all the flour had been cooked, one biscuit was given to each of the Briers, but to them alone, and while they were eating Haynes drew out a five-dollar gold piece and offered it to Towne for a single biscuit. It was re-



fused. Almost fifty years later, in a letter to the few remaining Jayhawkers, the Reverend Brier described the scene, saying:

"The Captain wept and said to me, 'I have the best 160 acres in Knox County, Illinois, 100 stock hogs, and 2000 bushels of old corn in crib, and here I cannot get one biscuit for love or money,' and the boy looked sad and disappointed and went away to his blankets."<sup>38</sup>

The next morning Towne and his group left, and of him almost nothing more is known. Many years later L. Dow Stephens wrote that this party was the one which engaged in a fight with the Indians on the Chowchilla River from which but two escaped.<sup>39</sup> Be that as it may, it is known that Towne and at least one of the Turner brothers did get through to the mines, and that these two became acquainted with Dr. E. Darwin French, who first visited Death Valley in 1850, and ten years later came again with a party of prospectors from Oroville, in search of the "Gunsight Lead." On the latter expedition Dr. French named "Towne's Pass," in evident honor of the captain whose biscuits Mrs. Brier cooked that dreary night in Panamint Valley.<sup>40</sup>

Most of the Jayhawkers also left that next day, taking their course southwesterly to the edge of Panamint Valley and thence over the Slate Range near the point where it joins the Argus Range, possibly at the very spot where the Trona-Ballarad road now crosses, but probably up the canyon already explored by Brier. A short way up this defile they apparently discovered a passage up a side "draw" southward and thence over the ridge, where they found themselves at the northern boundary of the wide desert valley in which the borax and potash lake later known as "Searles Lake" is located.<sup>41</sup> They moved southward toward the lake, hoping to find it fresh, but its contents proved to be bitter and undrinkable. Desperate for water, the party once more headed northwesterly for the mountains.

Later on during the same day on which the Jayhawkers left, the Briers packed their oxen and started on, following the trail of the advance parties. At sunset they found a group of stragglers, six in number, including Messrs. Fish and Gould, already mentioned. After a dry camp in the open valley, this party moved forward and at nightfall reached a tiny seep of moisture, apparently a short distance up Water Canyon. In the morning some of the oxen were missing, and while one of the stronger men returned for them, Brier

and his family, with two of the men, started up a side gulch at the head of which Brier had found what seemed to be a possible way out. Whether it was the same exit which the advance party had taken is uncertain, but by early afternoon the group was on the summit. Fish and two others, all nearly exhausted, had waited in the canyon for the lost oxen, and when they were brought up, the final group started. It was a hard climb, and old "Father Fish," as Brier called him, held onto the tail of one of the oxen for assistance in surmounting the ridge. Just across the summit he "reeled and fell" and could go no farther. Everyone was tired and excited, and Fish was therefore left where he fell while the rest moved on down to the valley beyond. (The next morning Brier and a companion went back for the old man, only to find him dead where he had fallen — the first known casualty among these Death Valley pioneers. His body was left where it lay, with but a few bits of brush to shelter it from the desert sun, and Manly later wrote that when he revisited the desert in 1861, he found Fish's bones still lying on the rocks where he died.)<sup>42</sup>

On the same day that Fish fell another man, Isham by name, lay down exhausted and enfeebled by thirst, while the Brier party struggled southward across the sandy, almost-level Searles Lake valley to the edge of the lake itself, returning part way, bitterly disappointed at finding its water undrinkable. It was a desperate moment. Night had come upon them; they were exhausted; no one knew what to do. Just then an emissary from the advance group met them with the news that "Deacon" Richards had found a spring in a side canyon of the Argus Range, not many miles away. The Briers were now at a point not far north of the present chemical plant of Trona, and the spring, thereafter for many years known on the desert as "Providence Spring," was possibly the one now called "Indian Joe's Spring," located in a canyon some six miles northwest of Trona, and which now supplies domestic water for the town. However, that spring seems too far south to fit the descriptions left by Brier, and Tom Wilson, the Indian, believes the spring in question was probably that now known as "Peach Spring" in Bruce Canyon, where he lived as a boy, and above which a very old Indian trail leads westerly over the Argus Range and thence down Wilson Canyon to Indian Wells Valley, coming out at a point slightly northeast of the China Lake *playa*.

Here, indeed, was a "providential" discovery, and the Brier group moved on at once. By the time they reached the spring, Asa Haynes and several of the advance Jayhawkers had apparently left, crossing the summit at the head of the canyon and descending in a westerly direction into Indian Wells Valley, where they found a small brackish spring, later crossing the wide valley to the celebrated water-hole later to be known as "Indian Wells."<sup>43</sup> Here they found a well-marked Indian trail leading south, and following it they soon came to the forks, near the present-day "Freeman's Junction," where a side trail led up westerly over the Sierra Nevada by way of Walker Pass. They discussed what to do, but finally determined to keep on south, on the main trail. As Manly later reported, they felt that this wide trail *must* lead somewhere, and they would follow it, if necessary to Mexico.<sup>44</sup> Edward Doty's group of Jayhawkers followed Haynes and his party over the Argus mountains to Indian Wells, where they camped to rest their stock.

Manly and Rogers, now trailing the advance parties, missed Providence Spring,<sup>45</sup> and after a fruitless trip to the borax lake, they struggled up a bare, southern buttress of the Argus Range, crossed the summit in great distress from want of water, and descended toward Indian Wells Valley, where their lives were saved by the timely discovery of some tiny sheets of ice, no thicker than window glass. The water, on the surface of which this ice had formed, had all seeped away in the sand, but from the small pieces that still clung unmelted to the neighboring grass and bushes they succeeded in obtaining about a quart of water. This was their closest call, and it seems highly probable that, had they not discovered this ice, they would that day have perished on the desert. Ahead of them stretched a wide, sandy plain, with the flat *playa* of "China Lake" in its center.

Proceeding westerly across the broad valley, probably slightly to the north of the present settlement of Inyokern, they saw smoke to the northwest and late that night, not without violent misgivings, they approached the campfire. It might well be an Indian camp, thought they, but their thirst made them desperate, and it was a pleasant surprise when, after lying for a time in some bushes, they finally recognized the men about the campfire as Captain Doty and his group of Jayhawkers. At this camp near "Indian Wells" (from which the entire valley takes its name) Manly and Rogers were told of Providence Spring, and the next day started ahead. They too

kept on south at the fork of the trail, where the branch turned off to the right up Walker Pass, and they encountered Asa Haynes and his advance party, discouraged and despondent, probably in the wild canyon later known as "Last Chance Canyon," where today is obtained the seismotite from which "Old Dutch Cleanser" is made.<sup>46</sup> From this point the two messengers pressed on, finding good water at a little spring surrounded by willows, not far from the canyon's mouth. This was doubtless either the famed "Koehn" [or "Cane"] Spring, or one of the other water-holes which dot the northerly edge of arid Fremont Valley along the celebrated Garlock fault.

No attempt will here be made to trace the various routes in detail from this point across the Mojave Desert and thence down Soledad Canyon to the *San Francisquito Rancho* of the Del Valle family near Newhall, which the main party of Jayhawkers reached on February 4, 1850.<sup>47</sup> Manly and Rogers had by that time passed the ranch, had returned, and had started back toward Death Valley through another canyon. They had obtained three horses and a small mule, together with some provisions. That they actually did return to the Bennett party, camped there on the desert, is ample testimony to the high courage and deep sense of responsibility which these two remarkable young men possessed.

Their return route was much the same as the route out, save that they went by way of Elizabeth Lake, and of course took the Jayhawker route past Providence Spring, where they buried some of the food, and near which one of their horses died. North of Searles Lake they visited Isham's grave, and camped on the pass over the Slate Range, near the spot where Fish had fallen. Crossing Panamint Valley, they headed for a "rough looking canyon" directly opposite. Part way up they were forced to leave their two remaining horses to perish of thirst in the canyon's depths. The little mule, however, was able to surmount a difficult dry waterfall, and the discovery of a good spring above it gave them renewed strength.

Identification of this canyon is, of course, highly important. As the messengers surveyed the Panamint Range from the valley it seemed to stand before them like "a mass of piled-up rocks so steep that a dog could hardly climb it." Dr. Wolff suggests that they surmounted the range through Redlands Canyon, but that canyon started south during the time that Manly and Rogers were away. For was not "nearly opposite" them as they descended the Argus Range,

and it seems to lie altogether too far south to have comprised this portion of their route.<sup>48</sup> "South Park Canyon," on the other hand, lies almost directly opposite their Slate Range vantage point, and is said by old-timers of the region to comply in every respect with Manly's description, including high, almost overhanging walls, and a waterfall, usually dry, above which is a spring. In addition, the Indians identify this canyon as the Manly-Bennett party's route, and it heads in "South Park," the flat, park-like area near the summit of the range, just west of "Manly's Lookout." For a number of reasons, therefore, it is at least tentatively concluded that South Park Canyon formed the avenue of approach to the Panamint Range on Manly's return to Death Valley, and the way of escape on the journey out with the Bennett and Arcane families.<sup>49</sup>

Twenty-six days, reports Manly, after they had left the party near the mouth of Six Springs Canyon in Death Valley, the two youths again made their way down that canyon with their little mule. Between its mouth and the camp they found the body of "Captain" Culverwell, lying unburied on the sand, where he had fallen in an apparently lone attempt to escape. They hurried on, wondering as to the safety of the others, but soon joined the group at the "good spring" camp. It was a joyful reunion. Here the remaining oxen were packed (one of them carrying the small children), and the men and women who were still there set forth on the long journey out to the settlements.

Not all those who had been left behind were present when the boys returned. Gone were the Earhart brothers and the Wade family, as well as poor "Captain" Culverwell. The three or four other single men who had been with the group which waved the boys farewell were also gone. Nothing is known of the fate of the Earharts or the nameless single men. Doubtless they left during the long wait, and possibly all escaped, though the fact will probably never be known.<sup>50</sup> "Captain" Culverwell, as has been seen, lay where he fell, probably somewhere on the wide alluvial slope southwest of the Eagle Borax Works site, but possibly near the mesquite thickets surrounding "Bennett's Well," though the exact spot will doubtless never be known.<sup>51</sup>

There remains to be considered the fate of the Wade family, which many years it was thought that they had perished on the desert. Oddly enough, however, it now appears not only that they made

their way safely out to the coast, but that in so doing they discovered and followed a much easier route than that taken by Manly and Rogers and the Bennett party, and were, in fact, the only members of all these parties to succeed in extricating their wagons from Death Valley. (Of course, the Earharts may have followed them out.) For many years after their desert journey the Wades lived at Alviso, near San Jose, where for a time Mr. Wade kept a small hotel, and it seems almost incredible that, with the exception of Stephens, neither Manly nor the two or three Jayhawkers who lived in or near San Jose apparently ever came in contact with them. Yet Manly seems to have been ignorant of their fate — at least prior to the date of publication of his book.<sup>52</sup>

Fortunately, their story has been preserved in an account written by a Mrs. Edward Burrell, of Santa Clara, from the report given her directly by Almira Wade, one of the children on the trip across the desert. This account was published in the *San Jose Pioneer* on December 15, 1894, and from it it appears that Henry Wade became desperate at the long wait, and determined that "If Mr. Manly and Mr. Rogers could go on foot for help, he and his family could go on foot to help." They therefore packed their wagons and started directly south down the valley.

This route led them along the westerly side of Death Valley to the point where it opens to the south in a wide desert, surrounded by mountains. A Frenchman, who had apparently been with the waiting party, was taken along, and he and young Harry Wade went ahead each day to find grass and water, signaling with smoke for the party to come along. After a few days of such travel, they passed along the valley east of the Avawatz Range, circled the usually-dry *playa* now known as "Silver Lake," and soon discovered that they were at the sink of the Mojave River — here dry, but with occasional water-holes. Shortly thereafter they met a group of prospectors who gave them some flour and directed them to Captain Hunt's trail, which led westerly, up the course of the river. From here on they had a comparatively easy route, and on February 10 reached Rowland's ranch near Los Angeles.

The Bennett and Arcane families, with Manly and Rogers, again unwittingly took the harder course.<sup>53</sup> The group climbed the steep, rocky Six Springs Canyon, followed the youths' route over the summit of the Panamint Range, and thence probably descended through

South Park Canyon to Panamint Valley, though not without great difficulty in getting the oxen down past the dry fall. On across the Panamint desert and up Water Canyon they went; thence up the "draw" to the left and over the ridge past poor old Fish's body, still lying exposed to the elements; thence across the plain north of Searles Lake to Providence Spring, and over the Argus Range to Indian Wells Valley, and south, following the Jayhawkers' trail. All finally arrived safely at the Del Valle family's *San Francisquito Rancho* near Newhall on March 7, 1850, and thence traveled on to the Pueblo de Los Angeles.<sup>54</sup>

At the summit, near the head of Six Springs Canyon, occurred a moving scene. Bennett and Arcane and Manly had climbed an eminence to view the surrounding country, and there,

"Just as we were ready to leave and return to camp we took off our hats, and then overlooking the scene of so much trial, suffering and death spoke the thought uppermost saying 'Good-bye, Death Valley!' Then we faced away and made our steps toward camp. Ever after this in speaking of this long and narrow valley over which we had crossed into its nearly central part, and on the edge of which the lone camp was made for so many days, it was called Death Valley.

"Many accounts have been given to the world as to the origin of the name and by whom it was thus designated, but ours were the first visible footsteps, and we the party which named it the saddest and most dreadful name that came to us first from its memories."<sup>55</sup>

And so we leave the pioneers of Death Valley. Had it not been the middle of winter when they wandered down into that great sink, and had they not possessed a "traveling food supply" in their oxen, it seems probable that no one of them would have lived to tell the story. There are still numerous minor mysteries respecting certain of the various parties, and there are a few somewhat obscure details in respect to certain portions of their routes. But in the main the story is clear, and we of today can trace these wayfarers along the major portion of their journey with assurance that here trod the first white men to descend into and cross Death Valley.



## NOTES

<sup>1</sup> The summer heat of this arid region is not to be taken lightly. In July, 1936, the writer was lured to Death Valley by news of the dramatic rediscovery, in an obscure canyon of the Panamint Range, of the tiny water-hole now known as "Jayhawker Spring." The official temperature at Park Headquarters that day was 128°, and to view the spring the party was forced to walk some six miles in even greater heat. That the trip was well worth the effort will appear hereinafter. But such a taste of what Death Valley means in summer served as ample confirmation of the legends which surround it. We knew that at the end of our tramp there would be water in plenty, and a waiting automobile. What might have been our thoughts had this not been true, with canteens empty and no more water in sight, may be left to the imagination, for not many years previous the skeletons of two prospectors, overcome by thirst and heat, had been found near our trail, barely a mile from the famed "Emigrant Spring."

<sup>2</sup> Although Manly's book did not appear until 1894, he had previously published two shorter accounts of his experiences on the desert. The first of these was quite brief, appearing in the *San Jose Pioneer* for April 21 and 28, 1877. The second, much more extended than the first, was published serially in a journal known as *The Santa Clara Valley* during the years 1887 and 1888. It was from this second account that Manly's book was obviously elaborated. In addition, it should be observed that in 1861 Manly revisited the Death Valley region in search of the "Gunsight Lead." His account of that visit appeared in the *San Jose Pioneer* for May 15 and June 15, 1895. He also wrote a number of other articles for that journal, including "How Furnace Creek Got Its Name" (August 1, 1893); "The Original Jayhawkers" (March 15, 1894), and "Visit to a Pioneer" (John Rogers) (July 15, 1895).

<sup>3</sup> The insufficiency of arm-chair methods as aids to the solution of this particular problem seems well exemplified in a very recent publication entitled "The Jayhawkers of Death Valley" in which the author, John G. Ellenbecker, of Marysville, Kansas, attempts to describe the Jayhawker and Manly routes without reference to actual geography or to many of the simplest facts which a personal inspection of Death Valley would have brought to light.

<sup>4</sup> See "Route of the Manly Party of 1849-50 in Leaving Death Valley for the Coast," by John E. Wolff, Pasadena, California, 1931, pp. 29, illustrated with a sketch map and photographic illustrations by the author.

<sup>5</sup> Although in a number of important respects the conclusions here announced differ from those reached by Dr. Wolff, his preliminary examination of the problem was highly significant, and has proved of much value. The present study goes beyond the limits of his effort (which was confined to the Manly-Bennett party's route out of Death Valley) and has been checked at every point by responsible officials of the National Park Service, as well as by numerous other informed persons. In addition, personal exploration on the ground has been made by the writer in respect to most sections of these pioneer routes which present problems of special difficulty. However, it should be understood that finality is not here claimed. Indeed, it cannot often be asserted in connection with such matters, since new source material is constantly being unearthed, frequently in the most unlikely spots. All that is here intended is a serious attempt for the first time to bring together in a single place, and fairly to evaluate, all the presently-known evidence bearing upon this problem. It is to be hoped that this study may result in the discovery of much additional data throwing further light upon these matters, and particularly upon the more obscure sections of the routes here under consideration.

<sup>6</sup> The train took the title "The San Joaquin Company," a name soon corrupted by most of the emigrants into "The Sand Walking Company"—appropriate enough in the light of what transpired.

<sup>7</sup> Smith was later accused by some of the emigrants of being a Mormon emissary, sent out from Salt Lake either to lure the party to death on the desert or to use them to discover a route which the Mormons might later exploit. This is now known not to have been the fact, as Elder Addison Pratt's *Journal* specifically declares Smith to have been "a Gentle," and the Henry W. Bigler *Diary* discloses that the group of Mormons who accompanied Smith apparently believed in his purported "cut-off" until a number of days had passed after the train's break-up. Despite his bravado, Smith seems not to have been made of particularly stern stuff, since within a few days he was so frightened by the prospect ahead that he turned back, and is said to have returned, full of



wild tales, toward Salt Lake City. Henry Bigler later wrote that Smith met another Mormon caravan on its way to Los Angeles and actually came through with that party to California.

<sup>8</sup> Two days after the break-up of Hunt's train, the seceding emigrants found themselves on a high ridge overlooking a precipitous gorge, impassable for wagons. The exact location of this ridge, to which the wayfarers gave the highly appropriate name "Mount Misery," has long been the subject of speculation. Recently, however, Mr. Charles Kelly, of Salt Lake City, noted a statement in Bigler's *Diary* to the effect that Bigler had carved his initials in the gorge below this camp, and in September, 1938, the location of "Mount Misery" was conclusively established when Mr. Kelly, after a considerable search, succeeded in finding the initials "H. W. B." incised on a rocky wall in the depths of Beaver Dam Wash, some four miles below its head. This Wash is a tributary of the Virgin River, and the point in question is close to the Nevada Line in the extreme southwestern corner of the state of Utah. (See Kelly, Charles, "On Manly's Trail to Death Valley," in *The Desert Magazine*, El Centro, California, Vol. 2, No. 4, Feb. 1939.)

<sup>9</sup> Day-by-day accounts written by at least three such members of Hunt's original party have recently come to light. See the *Journal* of Elder Addison Pratt, a typed copy of which is filed in the Bancroft Library at the University of California. (This contains excerpts from Henry W. Bigler's *Diary*, and from an article by Elder George Q. Cannon, published in the *Juvenile Instructor* at Salt Lake City, Vol. 4, pp. 84 et seq.) The entire Bigler *Diary* is also of great interest in this connection, and has recently been made available by the Federal Writers' Project. The manuscript *Journal* of William B. Lorton is extensive and contains many details hitherto unknown respecting the Knoxville Boys (the "Jayhawkers") prior to the break-up of November 4, 1849. It is privately owned and is as yet unpublished. In addition, see "Southwest from Salt Lake in 1849," by John W. Caughey, and the accompanying narrative of Jacob Y. Stover, published in *The Pacific Historical Review*, Vol. VI, No. 2, June, 1937.

<sup>10</sup> The writer is now engaged in preparing a much more extended narrative of this entire episode, in which all existing accounts will be discussed and the various routes will be traced in detail from Salt Lake City to the coastal settlements.

<sup>11</sup> The "Log" of Sheldon Young forms a part of the remarkable collection of "Jayhawker Papers" in the Huntington Library. While sketchy in nature, it was a contemporaneous record and has proved invaluable in the present study. The "Jayhawker Papers" comprise the scrapbooks and letter files of John B. Colton, who for many years actively promoted annual reunions of the survivors of his party. Portions of Sheldon Young's "Log" were published in the *Kansas City Journal* for Feb. 14, 1900, and the *San Francisco Chronicle* for Feb. 15, 1903.

<sup>12</sup> The Indians have recently reported that all the men of the village had that day gone out to follow the advance parties of white men, to see what they were doing and to pick up any of their discarded belongings. The women hid in the mesquite thickets, but one very old man (Manly's "mummy") had a broken leg and they were forced to leave him in a small hole in the sand. Manly's kindness to him (he is said to have given him a drink of water and a piece of ox meat) surprised and pleased them, and though the old Indian is said to have died of excitement and fright the next day, the band decided that the whites meant no harm to them.

<sup>13</sup> This ranch, which is now the site of an extensive auto camp for Death Valley visitors, was originally named "Greenland" by the Borax Company in the early 'eighties — a name officially adopted by the United States Weather Bureau, which here established a station in 1891. The warmish run-off of Furnace Creek furnishes an ample supply of water for the irrigation of approximately twenty acres, and the ranch was first used for raising produce for the borax workers and their stock. A governmental date-palm experiment station was also located here for some years, and the ranch forms a striking patch of green against the drab colors of the surrounding desert. It was at this oasis that the highest temperature ever encountered by the United States Weather Bureau (134° Fahrenheit) was recorded some years ago.

<sup>14</sup> This water-hole was for many years known as "Salt Well," and is said to have been named "McLean's Spring" some twenty-five years ago by representatives of the Automobile Club of Southern California, in honor of a member of that organization's party which originally placed road, direction and water signs in Death Valley. It is now shown on the official Death Valley Monument place-name map as "Jayhawker

Well"—certainly an excellent name for this important historical spot. The suggestion has at times been made that this Jayhawker camp might have been at the spring near which the National Park Service has recently erected its Headquarters, some six miles north of the mouth of Furnace Creek Wash, near which spot the Boundary Survey Reconnaissance party of 1861 reported that remnants of at least a few emigrant wagons were found, and near which Mr. Curry, National Park Naturalist, recently picked up a piece of very old, hand-worked timber containing a wooden peg at one end. While a group of the emigrants of 1849 may well have camped at this spot, Manly, who was an experienced frontiersman, would hardly have taken all day to reach that area. McLean's Spring was located near Salt Creek, some seventeen miles northwest of Furnace Creek Inn, and the distance from the Bennett camp seems not at all too great to have been covered on foot by Manly in one day. He distinctly states that he was all day making the trip to the Jayhawker camp, and he declares that he started his return trip "before daylight," and that "it was almost night before I reached our camp." The Park Headquarters must therefore be ruled out in favor of McLean's Spring as the site of this dismal Jayhawker camp, and a few years ago certain relics, thought to have been the remains of that party's wagons, were discovered near the spring in question. The "Log" of Sheldon Young, already mentioned, amply corroborates this conclusion, as do the reports of the Boundary Survey party of 1861, and the Blasdel party of 1866, both of which camped on this spot.

<sup>15</sup> See "Our Christmas Amid the Terrors of Death Valley," an interview with Mrs. Julia Brier, published in the *San Francisco Call*, December 25, 1898.

<sup>16</sup> It is reported that a very old ox-yoke was recently discovered in Dry Canyon, just south of Tucki Mountain. Whether this yoke belonged to any of the 1849 parties is hardly determinable at this late date, but it is of course possible that some one of the several parties may have attempted to cross the range at this point with ox-teams and wagons.

<sup>17</sup> Though Manly mentions meeting Gould and Fish on his way back to the Travertine Spring on December 28, he says not a word about the Georgians. It therefore seems likely that they did not enter Death Valley by way of Furnace Creek Wash, but in all probability kept on across the northern arm of the Amargosa Desert (after the Jayhawkers, the Briers and the "Mississippi Boys" turned south) and found their way over the Funeral Range at or near what is now known as "Daylight Pass," possibly over "Indian Pass." Such a route would have brought them almost directly to the Jayhawker camp at "McLean's Spring," as they crossed the valley from east to west.

<sup>18</sup> Reasonably accurate location of this camp is important, for here the party later waited for Manly and Rogers while the youths sought aid from the settlements. For many years it was generally supposed that this main camp was at the spot known for the past half-century as "Bennett's Well." Curiously enough, however, that particular water-hole apparently received its name not from Asahel Bennett of the '49 party, but from one "Bellerin' Tex" Bennett, a well-known Death Valley "character" of borax days. Moreover, "Bennett's Well" is just that—a well—and apparently never had a living spring and short running stream, as described by Manly. Having camped at these various spots on several occasions, the writer believes that the Bennett-Arcane camp must have been at a point north of "Bennett's Well," though the exact location, as between several possibilities, must probably remain indeterminate. The Indians have a tradition that the camp was near the Eagle Borax Works site.

A decade after the forty-niners' passage, the McCormack party of prospectors is said to have found relics of the original Bennett party, still lying on the ground where the long camp was made. This account would apparently identify the spot as Tule Spring, the first surface water on the west side of Death Valley along the route south from the crossing of Salt Creek. Strangely enough, it now seems doubtful whether the McCormack party actually went south of the Furnace Creek area.

The fact that a "Bennett's Spring" or "Well" appears on certain of the maps of this region dating from the 'sixties and 'seventies does not assist in this problem of identification, since it doubtless refers to the name given by McCormack's party, or some other group of prospectors, to the supposed site of the Bennett camp, and may refer to almost any of the springs or water-holes along the west side of Death Valley. The fact that "Tex" Bennett later dug the well at the present "Bennett's Well," for use by the twenty-mule-teams of the borax company, seems to have fastened the name on that particular spot. But that fact can have little or no significance with respect to the problem of the forty-niners' campsite.

<sup>19</sup> In his earlier account (*The Santa Clara Valley*, March, 1888) Manly locates the "sulphury water hole" on the floor of the valley, in which event it may possibly be identified with "Shorty's Well," which is located near the recently-placed monument commemorating "Jimmy" Dayton, who perished on the desert near this spot many years ago, and "Shorty" Harris, a well-known desert prospector who died in 1935. While this water-hole is frequently found to be somewhat "sulphurous," it hardly seems to be in the proper location to have been the water-hole described by Manly. Oddly enough, a letter recently received by Mr. Goodwin, of the National Park Service, describes a visit to the valley many years ago, at which time—so the writer of this letter declares—a sulphury spring "belched forth" at the Eagle Borax Works site. No confirmation of this statement has been found in other sources.

<sup>20</sup> In speaking of his return trip Manly apparently stretches this distance to some thirteen miles. As a matter of fact, his estimates of distances can hardly be deemed controlling, because of the great lapse of time which intervened between the events in question and the writing of Manly's account of these adventures. Distance is frequently a highly illusory matter, and even mileage estimates made "on the spot and at the time," in daily journals or diaries, are often found to vary widely from the fact, depending upon the weather, the nature of the terrain traversed, and the personal idiosyncracies of the individuals concerned.

<sup>21</sup> Dr. Wolff identifies this canyon as "Warm Spring Canyon," which for a number of reasons can hardly have been the one in question. In the first place, it is much too far south, thus greatly accentuating the discrepancy in Manly's mileage statements. More important, it is a broad, wide canyon, of easy gradient, up which the ox-teams could readily have passed with the wagons. Finally, no party ascending that canyon could well have missed the large, flowing spring of warm water from which it takes its name. Yet Manly, usually so accurate respecting details, mentions no such spring. Apparently, for these and other reasons, Warm Spring Canyon must definitely be ruled out as having formed any portion of the Bennett or Manly routes.

H. Donald Curry, Park Naturalist, and Chief Ranger Thomas Williams, of the Death Valley National Monument, recently made the ascent of the North Fork of Six Springs Canyon, finding it readily passable for animals (though not for wagons). Tom Wilson, the Indian hereinafter mentioned, declares that the South Fork is likewise so passable. All things considered, it seems highly probable that the North Fork formed the route used by Manly and Rogers, and later by the Bennetts and Arcanes, though the South Fork (commonly known as "Galena Canyon" and heading just north of Gold Hill) may have been the canyon in question. In this event the "small seeps of water" found by Manly near the head of the canyon were perhaps at what is now "Arrastre Spring," in the northeast corner of Butte Valley, though small springs are also said to occur toward the head of Galena Canyon itself.

<sup>22</sup> The Wades were not generally considered members of the Bennett party, but seem merely to have camped nearby. Their significant and successful effort to escape independently from Death Valley will be discussed later.

<sup>23</sup> According to the local Indians, their band hid in the mesquite thickets near the Bennett party's camp, hopefully awaiting the death of the white men, whose wagons and contents would prove a treasure, indeed. When asked why the waiting Indians did not attack the party, the apt reply was made by one: "Why kill 'um? Maybe Indian get killed too. Just wait. Pretty soon these feller die and Indian get everything without chance to get hurt." Fortunately for the Bennett party, Manly and Rogers returned before the food was exhausted. In the end, however, the Indians got the wagons and such contents as the emigrants were unable to pack on their oxen. The "waiting" strategy seems to have marked the entire course of conduct of the local Indians in relation to these first Death Valley white men.

<sup>24</sup> In describing the final trip out with the Bennett party, after remarking about the steepness of the canyon which they had ascended, Manly remarks that camp was made in "a narrow pass in the range," and then describes the upper reaches of the canyon with photographic accuracy, saying: "The slope to the east was soon met by a high ridge; between this and the main mountain was a gentle slope scattered over with sage brush and a few little stools of bunch grass here and there between." This description would also fit the area near "Arrastre Spring," which may have been the water-hole at which the party camped, if "Galena Canyon" was the one ascended. It has recently been suggested that this "gentle slope" be given the apt name of "Old Crump Flat," after Bennett's slow and steady old bridge ox, who carried the four

children of the party safely out to the settlements on his broad back and in his saddle-bags.

<sup>25</sup>The view from Gold Hill is superb and its summit may easily be reached by a good trail which leads to some galena mines high on its slopes. This trail starts in a small side canyon which empties into Warm Spring Canyon not far above the warm spring.

<sup>26</sup>The road which now leads up Warm Spring Canyon from Death Valley crosses Butte Valley, past the striped butte, to Anvil Spring, a noted water-hole, and thence descends into the lower end of Panamint Valley by way of a rough canyon known as Goler Wash.

<sup>27</sup>Manly states (1888 account) that they were "in a rather low pass but at great elevation and could see a great distance east and west" as well as north. The gap above Arrastre Spring is at an elevation of seven thousand three hundred feet, truly a "great elevation" above the floor of Death Valley from which the two youths had climbed. The description of a "pass at great elevation" would also fit the gap at the head of Johnson Canyon, where the trail today leads across the ridge to the head of Surprise Canyon, on the west side of the Panamints, in which the deserted silver camp of "Panamint City" lies. However, from that pass, while the view to the east across Death Valley is comparatively unobstructed, that to the west is not extensive, while to the north the shoulders of Telescope Peak cut off all view of the more distant country.

<sup>28</sup>The vertical distances traversed by these various parties were quite astonishing. From Death Valley up to Manly's Lookout the rise is approximately eight thousand feet and down to the floor of the Panamint Valley on the western slope is some six thousand seven hundred feet. The traverse of the Slate Range represented some three thousand feet "up and down," while the traverse of the Argus Range represented at least another four thousand feet more "up and down."

<sup>29</sup>Dr. Wolff expresses the view that Manly and Rogers refrained from climbing to the higher country, but crossed the almost level Butte Valley in a westerly direction and descended to Panamint Valley either through Redlands Canyon or down some neighboring ridge. In the light of Manly's 1888 account, above quoted, with which Dr. Wolff was apparently not familiar, this view seems untenable, for no such view as Manly describes could apparently have been had save from the particular high point above mentioned. Moreover, had Manly and Rogers refrained from climbing to the higher country northwest of Arrastre Spring, and had they instead made their way westerly through Butte Valley, they would inevitably have passed near the great striped butte, and Manly could hardly have failed to mention this striking natural phenomenon. In addition, from a point near the butte they would doubtless have seen the green grass and trees growing around "Anvil Spring," yet no mention is made of this remarkable, flowing spring. Finally, since Redlands Canyon opens at its head through a broad gap into the westerly rim of Butte Valley (though that valley does not drain into it) that canyon would have offered the most likely avenue of egress from the valley—yet Manly makes no mention of this comparatively easy means of exit. Apparently Manly and Rogers, and later the Bennett party, kept to the higher ground lying north of Butte Valley and missed both the great butte and Anvil Spring. If this be true, it must follow that some canyon other than Redlands was used by the party for their final descent into Panamint Valley.

<sup>30</sup>Dr. Wolff would have it that the youths here struck due west across the *playas* and thence over the Slate Range through a low pass almost directly opposite the mouth of Redlands Canyon. For a number of years this low gap has been denoted on the U. S. G. S. map as "Manly Pass," and there is also a "Manly Peak" on the same map between Goler Wash and Redlands Canyon, as well as a "Manly Fall" near the mouth of the latter. The writer has recently been informed that Dr. Wolff was responsible for having those names placed on this map.

As a matter of fact, while the gap thus denoted "Manly Pass" looks extremely easy of approach when viewed from the Panamint Valley side, and while some such route would apparently fit certain of Manly's descriptions of the route across the valley to the west (Searles Lake Valley), the pass in question is reported to the writer by an old prospector who lives near Anvil Spring to be impassable for animals. And since Manly and Rogers, on their return trip, drove two horses and a small mule over the range, and later took the mule and the Bennett party's remaining oxen over the same

route when the group finally escaped. It seems apparent that this "pass" must be rejected as having formed any portion of these routes.

In addition, Manly made at least two pencilled maps or charts of his route, one being now filed with the "Jayhawker Papers" at the Huntington Library, and the other having been given by Manly to Dr. T. S. Palmer, of Washington, D. C., when the two met in San Jose in 1894. On both of these maps a distinct northerly detour is shown from the point where the messengers reached the floor of Panamint Valley to the junction of the Manly and Jayhawker routes in that valley. This fits perfectly with the probable Jayhawker route, whereas a route over the so-called "Manly Pass" in the Slate Range does not fit the Jayhawker accounts at all. Doubtless Dr. Wolff was not apprised of the existence of these maps when he wrote his description of Manly's probable route.

<sup>31</sup> In 1861 Manly revisited the Death Valley area. His published accounts of this trip would seem to lead to the conclusion that he did not actually enter the valley, yet among the "Jayhawker Papers" in the Huntington Library is found the chart here reproduced. It is unquestionably in Manly's hand, and apparently supports the view that he did, in fact, revisit Death Valley itself, and particularly the spring where the Jayhawkers burned their wagons.

<sup>32</sup> On a neighboring rock is found a somewhat blurred inscription apparently reading "T. McGirr," possibly referring to Thomas McGrew, a member of the Jayhawker party. Moreover, in December, 1935, Mr. Curry, with Chief Park Ranger Williams and Ranger J. J. Nealis, located a boulder on an old Indian trail from Emigrant Canyon to Cottonwood Springs, about two miles northwest of the Park Service's "Emigrant Checking Station" (on the road between Stovepipe Wells Hotel and Towne's Pass), bearing the inscription "W. B. Roods, 1849." Doubtless the various Jayhawker groups wandered about this region seeking water and a favorable means of exit through the Panamint Range, and this forms another proof of the route taken by at least a portion of the party. The spelling of the name "Roods" is of interest, and Captain Asa Haynes' *Journal* contains an entry respecting "William Roods Pony." It may be that the spelling "Rude" found in the *Jayhawker Papers* was a mere phonetic recollection of the pronunciation of this young man's name.

Among the other inscriptions on the lava boulders at the "Jayhawker Spring" are the following: J. Hitchens, 1860; Frank L. Weston, March 27, 1861; T. G. Beasley; S. Kidd; W. W. McCoy; W. M. White; Chase; Cline; Butler, and "Lier" (possibly "Rier"). The first mentioned name is of particular interest. James Hitchens was a member of Dr. E. Darwin French's 1860 expedition to Death Valley in search of the "Gunsight Lead," and the next year he returned to this region as a member of the Boundary Survey Reconnaissance party, which crossed Death Valley with three camels and camped one night at this very spring. For many years the early maps of the region showed a "Hitchens Spring" at approximately this location — doubtless the spring at which these inscriptions are located.

<sup>33</sup> The elder Brier wrote in 1898 to "Deacon" Richards of the Jayhawkers that his family had traveled a great part of the way with the "Mississippi Boys," a group of whom left them near the head of Panamint Valley and made their way out through Darwin Wash (Letter, January 20, 1898). In an earlier letter he had identified that group as the one of which "Little West, and Tom and Joe, the darkies" were members (Letter, January 23, 1899). As will shortly appear, this was not the small party of which "Captain" Towne was the leader, since that particular group remained with the Briers at least as far as the camp in Panamint Valley where the horse bones were found. Mr. Goodwin, Superintendent of the Death Valley National Monument, is inclined to the belief that the Briers went out of Death Valley by way of the "Jayhawker Spring" route, but the writer feels that much internal evidence indicates that they followed Sheldon Young's party over Towne's Pass. In any event, all these parties (except the seceding group of "Mississippi Boys") were reunited at the camp in the mesquite in Panamint Valley.

<sup>34</sup> "Pete" Aguerberry and other old-timers of the region declare that these flats had good grass growing upon them up to a very few years ago.

<sup>35</sup> "Panamint George," now almost one hundred years of age, was a small boy in 1849. He distinctly recalls the coming of those white men from the north with "long whiskers and big cows." From them his people fled, but later followed them for the discarded possessions they might be able to pick up. He has identified the "Jayhawker Spring," and the route to Panamint Valley where he then lived in the Indian

camp in the center of the valley. Some of the emigrants stayed there as long as a week, according to old George, but after a few days they began straggling away, a few at a time, and "bimeby all gone."

<sup>36</sup> Brier later identified these as the two Turner brothers and two other men, named respectively Masterton and Crumpton.

<sup>37</sup> During the hey-day of "Panamint City" in the mid-seventies a road was built across Panamint Valley, up Shepherd Canyon and over the Argus Range to Darwin, then in its infancy as a rival mining camp. Old George, the Indian, recalls working on this road during its construction.

<sup>38</sup> Letter, J. W. Brier to his "Dear Old Comrades," from Antioch, California, January 16, 1896, in the *Jayhawker Papers*, Huntington Library.

<sup>39</sup> See "Life Sketches of a Jayhawker of '49," by L. Dow Stephens, San Jose, 1916. However, Stephens calls the leader of this party "Townshend" and identifies him with the "Georgia Company." Stephens' account is so full of inaccuracies respecting known facts that little credence may apparently be placed in his feeble recollections. No record of any such Indian fight on the Chowchilla has been discovered.

<sup>40</sup> See H. C. Hanks, "An Undeveloped Region," *San Francisco Bulletin*, February 10, 1869, in which this entire experience of Darwin French is related. It should be noted that for many years Towne's Pass was apparently known as "Townshend's Pass," and it is possible that someone of that name was a member of one of these several parties. Manly, in his chart of the Jayhawker route out of Death Valley, uses the name "Townson's Pass." Captain Asa Haynes states in his "Memoirs" that the Georgia company was "captained by a Mr. Townshend," and an undated entry in Haynes' supposed *Journal* (evidently inserted after the trip through the desert) states that "Indians killed Townson, scalped him, after got through." He also remarks "Old man Townson left—Baked up flour, and gave oxen to Brier." However, Brier's letters are explicit that it was Captain Towne of the "Mississippi Boys" who here left the party. In an article in *The Grizzly Bear* for June, 1911, John W. Brier (the six-year old boy of the Death Valley trip) states that it was Towne's group which discovered the fabulous "Gun-sight Lead," and that Towne himself "was killed some years later by the Tulare Indians."

<sup>41</sup> Young's "Log" remarks upon "standing water at the foot" of the descent from the ridge. This might well refer to the tiny *playas* still to be seen at the foot of the present Ballarat-Trona road grade, just south of the pass. Since it had recently been snowing in the higher mountains and raining at the lower levels, this *playa* was probably at this time covered with water, for on Dec. 31, 1938, shortly after a desert rain-storm, the writer camped near this *playa* and found such "standing water," a boon to the large herd of wild burros which now makes this area its headquarters.

<sup>42</sup> The writer and a party of friends recently spent a day exploring the Water Canyon region, and found that the gap at the head of the valley in which the small "standing water" *playa* is situated leads over into a rocky "draw"—steep but doubtless passable for animals—rising directly from Water Canyon. Another similar "draw" leads out of the canyon about a mile west of this gap into the next westerly canyon draining toward Searles Lake. It seems probable that one of these two relatively easy passes offered the route which Brier and his companions took. No traces of "Old Man" Fish's bones were discovered.

<sup>43</sup> Even by the emigrants of 1850 this water-hole was found to be walled up with rock. On some present-day maps the name "Homestead" appears at this point, and an important "C. C. C." Camp is now located on the neighboring hill, where an excellent supply of water has been developed.

<sup>44</sup> Somewhere along the route, assertedly after Isham died, a group of twenty-one men, including one Edward Coker, apparently left the rest and struck out for the west. Passing Owens Lake, they continued on along a "big trail" to Walker Pass, which they crossed, and descended by the Kern River to the San Joaquin Valley and thence north to the mining camp of Agua Fria in Mariposa County. (See "The Experience of Edward Coker" in Manly, *op. cit.* (1929 edition), pp. 497-501.) This account is somewhat puzzling, since it must be assumed from much other evidence that the main group of "Mississippi Boys," to which Coker's narrative apparently refers, actually left the other parties several days previous to Isham's death. Moreover, if—as Coker



distinctly states — his group passed Owens Lake, it must have left the Jayhawkers at or near the head of Panamint Valley, where Brier reports that the main party of "Mississippi Boys" left for the west up Darwin Wash.

<sup>45</sup> Apparently they also missed the Briers, who were probably then still camped at Providence Spring. At least Manly makes no mention of seeing them again, though Brier many years later wrote that the two boys had passed him somewhere on the desert and "filled themselves with my jerk," i. e., his jerked ox meat. (See letter, Brier to Richards, January 20, 1898, in the *Jayhawker Papers*, Huntington Library.) It is possible that Brier confused Manly and Rogers with two of the four other young men who, as has been seen, left the Bennett party and trailed the Jayhawkers. Manly mentions that he and Rogers met two of them in Indian Wells Valley and shared a bit of their meager store of meat with them. Young records that six unnamed men came into his party's camp on January 14, but this was probably altogether too early to have referred to Manly and Rogers.

<sup>46</sup> There is, of course, a possibility that the canyon in question may have been "Red Rock Canyon," through which the highway to Owens Valley now runs. But, all things considered, "Last Chance Canyon" seems much more probable as the 1849 parties' route.

<sup>47</sup> A young Jayhawker by the name of Robinson succumbed near the head of Soledad Canyon, as a result of drinking too much water from the icy stream, and it is reported that a Frenchman (name not recorded) wandered away from the party somewhere on the desert and was found some fifteen years later living with local Indians.

<sup>48</sup> The mouth of Redlands Canyon lies opposite and slightly north of Dr. Wolff's "Manly Pass" in the Slate Range. Had the messengers crossed over that pass Redlands Canyon would doubtless have been selected by them, although a high, dry waterfall at its mouth might possibly have deterred them. From the evidence now at hand it seems to the writer highly improbable that Redlands Canyon was the one used.

<sup>49</sup> Tom Wilson, the Indian, feels certain that this was the canyon so traversed. He has stated definitely to Mr. Goodwin, as well as to the writer, that the route did not lie through Redlands Canyon, farther south, or through Pleasant Canyon, to the north, which heads in "Mormon Gulch." Indeed, he has recently repeated that "Thorndyke's Canyon" was the one followed by the party. This is the canyon denoted on the map as "South Park Canyon." Mr. John Thorndyke, an old resident of the region, formerly mined in that canyon and built a road up it to his prospect. He has recently read Manly's account for the first time, and declares that South Park Canyon corresponds in all respects to Manly's description. He constructed a ramp for his pack animals around the dry waterfall to the spring above.

<sup>50</sup> Recently some ox-shoes, apparently very old, were found by "Shorty" Borden, a prospector, near the head of one of the forks of Six Springs Canyon. Whether these belonged to the oxen of any of these forty-niner parties will always remain a mystery, but it seems probable that they were in fact left behind either by the Bennett-Arcane group or the Earharts. It is of course possible that they were discarded that day the party first attempted to climb the range before Manly and Rogers left for help.

<sup>51</sup> In an article headed "On the Plains, 1849," published in the *Merced Star* for April 26, 1894, Rogers (there called John H. Rodgers) wrote that Culverwell's body lay at a point "within ten miles of camp," and that the captain had been "with the Aharts [Earharts]." Probably he was attempting to follow the Earhart party south when he fell.

<sup>52</sup> L. Dow Stephens, in a letter to John B. Colton dated March 16, 1884, states that "Old Man Wade" had recently died from a self-inflicted bullet wound at the age of eighty. He adds that "Wade had taken his family and Struck South down that Valley [Death Valley] and Struck the Old Spanish Trail at the Mohaves, which is the way we ought to have went." (*Jayhawker Papers*, Huntington Library).

<sup>53</sup> There seems to have been a certain perverse determination among these emigrant parties thus unwittingly to pursue the more difficult route. At no less than three points a slight alteration in their course would have led them to a relatively easier route to the settlements — southeast a few miles from Indian Springs to the "Vegas" on the Old Spanish Trail (the modern Las Vegas, Nevada); south a few miles from the crossing of the Amargosa (along the course later followed by the Tonopah and Tidewater Railroad), or south from the "long camp" in Death Valley (on the route taken by the Wades). Of less moment, but nevertheless important, would have been the adoption

of a route around the southern end of the Argus Range in leaving Searles Lake Valley, i. e., by way of Salt Wells (or "Poison") Canyon.

<sup>84</sup> Manly's statements respecting elapsed time (26 days on his first trip out and back, and 22 days on the final trip out) are reconcilable with his statement that the Del Valle ranch was reached on March 7, only upon the premise that some three weeks elapsed between Christmas night, when he found the Briers at the Travertine Spring, and the day he and Rogers started out for help. Since this is a much longer period than would appear to be indicated by his narrative for this portion of the journey, it seems probable that a not unnatural foreshortening of the elapsed time on these various trips may have occurred in his mind over the years which intervened between the events in question and the actual preparation of his narrative.

<sup>85</sup> Manly, "Death Valley in Forty-nine" (1929 edition), p. 221. It must be noted that, although Manly thus asserts that his group was responsible for the name "Death Valley," the problem of the naming of the valley is not at all simple. Many years later Mrs. Brier claimed the same honor for her group, and today certain of the Jayhawker descendants and others are apparently making the same claim for the Jayhawkers. Several years of diligent inquiry into the question leaves it still not fully answered. For a full decade after the forty-niner parties had crossed the valley the name seems not to have appeared in print at all, and as late as 1860 a newspaper article about Asahel Bennett failed to make mention of this name. (See the San Francisco *Alta California*, April 26, 1860, under heading "Our San Diego Correspondence.") Then, of a sudden, early the next year, everyone who spoke or wrote of this area commenced to call it "Death Valley," using the name familiarly, as if it were an old and well-known name. The earliest published reference to the name as yet discovered by the writer occurred in the San Francisco *Alta California* for April 12, 1861, in an article dealing with the Boundary Survey reconnaissance party. And on the very next day the *Visalia Delta* used the name, also in an article referring to that party. Until more conclusive evidence be found, therefore, it seems probable that to the Boundary Survey group must be given the credit for originating — or, at least, for first actually applying — the name "Death Valley."



## AN INTRODUCTION TO CLARENCE KING'S

### "THE THREE LAKES"

BY FRANCIS P. FARQUHAR

IT will never cease to be a matter of regret that Clarence King did not more often apply himself to writing down the fascinating tales and vivid descriptions with which he so generously entertained his friends in conversation. His early enthusiasm gave us *Mountaineering in the Sierra Nevada*; the rising tide of his professional experience produced *Systematic Geology*; but there the record stands, except for a few "occasional pieces," among which *The Helmet of Mambrino* stands out as an example of what might have been.<sup>1</sup>

Several years ago, in the course of gathering material relating to the Whitney Survey of California (1860-1873) and King's Exploration of the Fortieth Parallel (1867-1879), I heard rumors of a poem called "The Three Lakes," but was unable to find a trace of anything substantial or even a printed reference to it. Then, one day I learned that George Gibbs, Jr., a member of the Sierra Club, had in his possession an album of photographs in which there were some poems and letters of Clarence King. I eagerly sought it out and was rejoiced to find that here was, indeed, "The Three Lakes." The reason for the obscurity now became apparent, for it was disclosed that only three copies had been made: one each for three little girls for whom the three lakes were named — Marian, Lall, and Jan. It was from two of these little girls, the Misses Sarah and Joanna Williams, of Yonkers, New York, that Mr. Gibbs had received the album, together with a letter from which the following paragraphs are quoted:

When we were *very* young Mr. and Mrs. Howland and their two children, Marian and George, came to live in Irvington,

<sup>1</sup> *Mountaineering in the Sierra Nevada*.—First edition, 1872; in 1874 an addition was made to the chapter on Mount Whitney in an edition called the fourth; another edition in 1902; a new edition, with preface and notes by Francis P. Farquhar, 1935. A number of the chapters first appeared in *Atlantic Monthly* in 1871.

*Systematic Geology*.—Volume I of *Report of the Geological Exploration of the Fortieth Parallel*, 1878.

*The Helmet of Mambrino*.—A letter written by King from Spain to his friend Don Horacio (Horace F. Cutter, of San Francisco), in *Century Magazine*, May 1886; included in *Clarence King Memoirs*, published by The Century Association in 1904; reprinted with introduction by Francis P. Farquhar, by the Book Club of California, 1938.

New York, in a house near us. Mr. Clarence King was Mrs. Howland's son by her first marriage. When Mr. King came home after climbing the Sierra Nevada, and later from his "United States Geological Survey of the 40th Parallel," he used to come to our house and relate his adventures to an enthralled audience composed of our grandmother, father and mother, and especially of our two small selves. One of his fellow-workers later said, "He had a gift of narration," and he surely had, to a remarkable degree.

Marian Howland and we often played together and our friendship was embodied in "The Three Lakes." Mr. King wrote the book and had *three* copies of it made, one for his sister, and one for each of us . . .

One thing more — In his letter to "Lall and Jan" (our childish names) he wrote "to *demoralize* your devoted friend." On one of his visits to our home, after his family left Irvington, he said he *must* return to New York in the afternoon, in spite of urgent entreaties to him to remain. However, after our noon dinner, when we had for dessert a boiled indian pudding, with a sauce of sour cream and molasses, he declared the pudding had demoralized him and that he would not go to the city. It was long a joke with us . . .

The album contains twenty-two leaves of stiff paper bound in heavy covers of red leather with ornamental tooling. The leaves measure  $16\frac{1}{8} \times 12$  inches. The contents consist of two poems, each one page, two letters each four pages, and twelve mounted photographs. The poems, title-page, and half-title are printed; the letters are reproduced by lithography from King's elegantly handwritten copy. The letters are dated 1870, as is the title page.

Here, then, was "The Three Lakes." But, of the lakes themselves, where were they? Were they still known as Marian, Lall, and Jan? The poems and letters stated very clearly that Lake Lall and Lake Jan were in the Uinta Mountains of northern Utah, but Lake Marian was not so easily placed. A granite rock-basin chiseled by ice, in a desert region, suggested the eastern side of the Sierra Nevada. But, for that location, the date was wrong. In 1870 King was working farther east on his Fortieth Parallel Survey. Perhaps his reports and maps would furnish a clue. King was always very sparing of narrative and dates in his reports, but his descriptions were usually very full and specific. Turning to *Systematic Geology*, it took but a

few minutes to find references to Lake Marian and to locate it in a general way in the Humboldt Range of eastern Nevada, now known as the Ruby Mountains.<sup>2</sup> Moreover, an illustration, in chromolithograph, corresponded closely with one of the photographs in "The Three Lakes." The atlas which accompanies the reports narrowed the search still farther, for on one of the maps the name appears at the head of a stream which flows into Franklin Lake on the easterly side of the range. At the point where this stream reaches the valley there is the name "Overland Ranch," and one has only to turn to maps of the present day to find this stream shown as "Overland Creek." Overland Lake and Lake Marian, then, must be the same.

There the matter stood when Mrs. Farquhar and I set out last September to visit the three lakes, if they could be found. At Elko, Nevada, we were fortunate in securing the assistance of Mr. E. M. Steninger, publisher of the *Elko Daily Free Press*, whose intimate knowledge of the Humboldt country enabled him at once to confirm the identification of Lake Marian with Overland Lake. He helped us on our way by telephoning to Ruby Valley for horses and a guide. That night we lay in our sleeping bags on the shore of the little lake amid the familiar surroundings of ten thousand feet, just as if we were in the Sierra, certain that we were at the scene of Clarence King's adventure of long ago in "the Stone Giant's Bowl." In the morning we wandered around the lake and took photographs from precisely the same points as those in the album, even identifying the rocks in the foreground. Time did not permit of our climbing to the head of the Giant, however, for we still had before us the search for Lake Lall and Lake Jan.

In Utah we fared not quite so well. We knew that our lakes lay near Mount Agassiz, and there was no difficulty in locating that mountain on the map. There were many lakes thereabouts, among them Mirror Lake, at the head of Duchesne River, where we knew that there were good accommodations. At Mirror Lake we did, indeed, find a pleasant lodge and a fine view of Mount Agassiz. But there we also found that the lakes we sought were on the other side of the range, well out of reach save by a pack trip. Reluctantly we gave up our visit to Lake Lall and Lake Jan and to Strawberry Hill until such time as we might have more leisure to explore this

<sup>2</sup> *Systematic Geology*, pp. 62-65, 475-476.

beautiful region, either from Mirror Lake or from the northerly approach at the headwaters of Bear River.

Marian Lake, Lake Lall and Lake Jan — they are there still, just where Clarence King found them nearly seventy years ago. But their names have faded away and are no longer to be found on the maps. Perhaps the names will be restored. Or, perhaps it is just as well as it is — that they should remain a little apart from reality, resting lightly on those lovely lakes in the land of poesy, once a fairyland to three little girls.

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THREE LAKES

MARIAN TALLMAN

and how they were named.

Christmas  
1870



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## THE STONE GIANT'S BOWL.



AR in the heart of the desert, over a desolate lowland,  
Looms, in the purple of evening, the glorious crest of a mountain;  
Snowy the locks of the monarch, and over his broad rocky shoulders  
The green perpetual forest hangs close, like an emerald vesture.  
The white-haired motionless statue, sitting with gaze never turning,  
Holds in his rock-arms a basin, cut from the silvery granite,  
Chiselled by ice and by tempest, trimmed with the fir and the pine tree.  
Carefully, year after year, this giant pours from the basin  
A streamlet as clear as a crystal, which, hour by hour descending,  
Reaches at last to the lowland, there by the feet of the statue,  
Quenching the thirst of the desert, making for ever a garden.  
Thus from his castle of granite, the old stone king of the mountains  
Silent and motionless sits, and from eyes never closing  
Looks downward and east on the desert, and over the bright blooming garden  
Where close to the skirts of his garments and over his sandals of granite,  
Blossoms and soft waving grasses, and silvery whispering willows,  
Hide in their shadowed recesses the mother-bird patiently sitting,  
And waft to the rose of the morning the welcome of carolling thrushes.  
The white-haired motionless statue sits with lips ever speechless,  
And watches from morning till evening, and on from evening to morning,  
The outstretched plain of the desert, where patient and wearily marching  
The trains of emigrant people, seeking for ever the sunset,  
Urge onward the slow-plodding oxen and long for the cool of the evening  
When the sun, low descending, gilds crown-like the brow of the mountain,  
And twilight on mountain-side gathers, and far falls the lengthening shadow.  
There then burns brightly the camp-fire; there, too, the weary and foot-sore  
Rest from their toil of the desert—forgetting the sun and the whirlwind;  
Over them sail the slow stars, through peaceful, sheltering heavens,  
And the kindly Stone Giant pours from his bowl, never failing,  
The silvery, musical brooklet, singing the weary to slumber.

*My dear Marie*

*When I camped at the foot of the great mountain which sits over the desert like a statue holding the stone-bowl and while I sat in my tent door I wondered why so full a brook should forever flow from the basin without draining it all. I looked up to the snowy head of the peak and resolved to climb there and make the old fellow's acquaintance.*

*So the good Jim saddled our two mules Minnie and Max and we rode up the mountain gorge, following as closely as we could the willow covered bank of our brook. As we ascended the cañon grew dark and narrow, its huge rocky walls towering up against the sky and covering us with deep gloomy shadows. At last we reached the lap of the mountain and came there upon the edge of the stone-bowl and were charmed to find the brook flowing from a lovely mountain lake. A clear sparkling basin of blue water, surrounded by crags of granite, about whose feet the perpetual snow lay in deep white banks. The slender shafts of alpine pines gather in clusters, sheltering a carpet of pleasant grass. Here and there the snow sloped down to the margin of the lake and thrust the edges of its drifts into the very water.*

*From above, the snowy head of the mountain looked pleasantly down, as if he would like to ask "well young man what do you think of my lake?" Such a lake as yours, I told him, should have a name and I am coming up to whisper one which will please your granite majesty.*

*So up I climbed all alone, while Jim rambled about the shores of the lake and the mules kept their noses in the tender grass.*

*Up over a rocky shoulder of granite and through the green pine of the giant's coat I made my way till I came to a rough cliff, too high to jump over, too steep to scramble down, and here I tied my climbing*



rope and went down band over band like a sailor, but it was tiresome  
and when I found a chink I put my foot in it and rested a moment.  
At last I stood on the head of the statue and whispered, "old fellow,  
I name your rock bowl down there LAKE MARIAN." The sun  
just then streamed through the clouds and the whole face of the  
mountain smiled as if he quite liked the name.

But the good natured old fellow said never a word, he only kept  
smiling about it more and more, as the clouds cleared away.

So my little sister your name is given the pretty lake: all the way  
home Jim and I kept saying, what a pleasant joke it all was.

Sometime you shall go up and see my granite friend with

Your loving brother

Clarence

The desert

1870

## THE ICE DRAGON'S NEST.



HIGH in the sapphire heaven, where the heart of America rises,  
Up o'er a green waved ocean of limitless plain and of prairie,  
Bright with the snows of the ages, as the crest of a tumbling breaker,  
Tower the luminous summits of grand and rocky Uinta.  
Why do they watch the red sun from the far off Atlantic arising  
Up from the golden aurora, on over desolate deserts  
And far white lines of Sierras, till into the starlit Pacific  
He sinks, and the twilight behind him glows pale in the purple horizon?  
Why thus love they the sunlight—fearful of cold and of darkness?  
This is the answering story told by the high Rocky Mountains.  
Ages long gone and forgotten, when young were the lofty Uinta,  
Born of the snow-cloud and tempest, a white-ice terrible dragon  
Rested his hard frozen body, and grew on the flank of the mountain;  
Cased in an armor of granite, strong armed—ice-hearted and cruel—  
He grew while the sky, ever clouded, buried the peaks in a snow-drift;  
Then, dragging his long icy body with slow irresistible movement,  
Crawled through the crags and the gorges, till, from his den in the mountain,  
Reaching the verdurous valley, froze with his breathing the pine tree.  
Wild burst the snow-cloud above him, white were the rocky Uinta.  
Then from the far azure heaven, high above mountain and snow-cloud,  
Shone the red sun in his brightness, warming the icy Uinta,  
Melting the snow from their shoulders, dispelling the storm-bearing vapors;  
Thick, and like spears swiftly flying, fell the red arrows of sunlight,  
Smiting the ice and the armor—slaying the glacier dragon.  
Vanished the snow, and to-day—where the terrible monster  
Crawled, and with armor of granite, blasted and smote on the snow-cliff,  
Wearing huge tracks in the mountain, chilling the air with his breathing—  
Green grow the pines, and the flowers breathe their perpetual fragrance  
Up to the sun as he sails through the cloudless and sapphire heaven,  
And forever the rocky Uinta glow red in the evening and morning.

*Dear Lall and Jan*

*The rocky Uinta towered above my camp and the sparkling Bear River flowed past my bed. In the dim night I could see the summits traced against a sky full of flashing stars. I made up my mind to climb the highest peak next day and then I fell asleep. Quite early I was in the saddle and rode alone up into the heart of the Uintas. The deep valley I followed was carved out of the solid rock and its whole surface was strangely polished by the old glacier which ages ago, the sun had melted away. At every step I saw the tracks of the ice monster, here the surface of the granite would shine like a marble mantel and there lay great trains of boulders just where they had fallen when the glacier perished.*

*Pine trees and little velvety lawns bright with alpine blooms—gentians—wild strawberries grew now and then in the valley but high above and all about rose the mighty cliffs of solid unbroken rock their summits sharp and terrible, piercing the clouds and catching a glow from the far unrisen sun.*

*I scanned the highest peak from tip to base and saw as I thought a possible way to climb it, so I "picketed" my mule Minnie knee deep in some jolly grass and set out.*

*It seemed to me I'd never reach the summit and I think now and then I was a little scared, for it is nice work making one's way up sliding debris slopes, where at any jump you may start a young avalanche and when you watch a rock go bounding down a thousand feet or so, it is no sort of comfort to think how odd you would look yourself, spinning and bumping along after the same style.*

*I was tired and hungry when I reached the top and walked to the brink of the great precipice, but I forgot all that, when I looked down into the valley and saw all of the Ice dragon's nest. There among the polished rocks and pines lay two beautiful lakes, side by side in the*

*very tracks of the glacier. I ran along the cliff to a long field of snow and down I slid like a wild creature, the snow flying in clouds and I going heels over head. Down through the pines I ran, till I reached the glacier tracks and stood on the ridge between my two lakes.*

*At my feet grew wild strawberries!*

*I looked a moment and then I remarked to a friendly sort of pine tree near by, who seemed to be the oldest inhabitant, "if any one comes up here ever, just please say that this one is LAKE LALL and that LAKE JAN and this pleasant green slope I should like to have you remember is STRAWBERRY HILL." The pine tree nodded more than I think could be accounted for by the wind. As I cooked my solitary supper that night "Minnie", who was tied in the pines, looked wistfully through the falling snow, but there was nothing in that frying pan, which could comfort her or demoralize*

*Your devoted friend*

*Clarence King*

*The Uintas*

*1870*

# SIERRA CLUB

Founded 1892

MILLS TOWER, SAN FRANCISCO, CALIFORNIA

THE PURPOSES OF THE CLUB ARE: To explore, enjoy, and render accessible the mountain regions of the Pacific Coast; to publish authentic information concerning them; to enlist the support and co-operation of the people and the Government in preserving the forests and other natural features of the Sierra Nevada.

JOHN MUIR, President 1892 to 1914

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## MEMORIALS

GABRIEL SOVULEWSKI, 1866-1938

In his report as Acting Superintendent of Sequoia and General Grant National Parks for the year 1892, Captain J. H. Dorst, U. S. A., makes special mention of Corporal Sovulewski, who had charge of the guard in General Grant National Park, that "he showed great tact in his relations with the numerous visitors, while he performed the duties required of him with firmness and thoroughness." And, when Gabriel Sovulewski retired from the National Park Service forty-four years later, the same words might well have been used.

Sovulewski was born in the Province of Suwalki, Poland, in 1866. At the age of 16 he came to America in search of the freedom that was then denied to Polish patriots in their own land. After a few years in Chicago he enlisted in the United States Army in 1888 and served for ten years in Troop K, Fourth Cavalry. In 1892 he was a corporal, in 1893 a sergeant, and in 1898 quartermaster-sergeant. At that time the recently established national parks in California were administered during the summer by U. S. Army cavalry troops, whose principal duties were the eviction of sheep and cattle trespassers and of hunters. It was only natural that some of the officers should become enamoured of the magnificent wild country entrusted to their care and take an interest in building trails, planting fish, making maps, and in devising means for greater protection of the forests and meadows. In such enterprises, Sergeant Sovulewski was more than a willing worker—he was an enthusiast. Yosemite became the object of that patriotic devotion which characterized his race and family. Returning to the Park in 1906, after an absence of seven years, he remained for thirty years, first as a worker on the trails, then as Supervisor of the Park in charge of all outside work, especially trail construction and road maintenance. The trails of the Tuolumne Canyon region owe much to his skill and special knowledge. Prior to the appointment of a full-time civilian superintendent of Yosemite National Park, in 1916, Sovulewski was for long periods, especially during the winter months, in full charge of the Park.

Gabriel Sovulewski had a remarkably powerful physique and as a young man showed great prowess in military sports. He held a medal for wrestling as well as one for sharpshooting. In later years his home in Yosemite Valley was a center of hospitality—a blend of Gabriel's Polish exuberance and the early American traditions reflected by Mrs. Sovulewski.

Sovulewski had many associations with the Sierra Club. He was ever helpful in preparing the high country trails for Sierra Club outings and was many a time a welcome guest at the Club's campfires. In 1935 the Sierra Club made him an honorary member, a recognition in which he took great pride.\* His passing, at San Rafael, on November 29, 1938, brought to a close a career of rare devotion to the public welfare.

FRANCIS P. FARQUHAR

\* Letter from Gabriel Sovulewski to William Colby, January 28, 1936, in *S. C. D.*, 1936, 21:1, p. 85.

## YNES MEXIA, 1870-1938

Ynes Mexia was born May 24, 1870, in Georgetown, Washington, D. C. Her father, General Enrique A. Mexia, was the son of José Antonio Mexia, a Mexican general under President Santa Anna. Her mother, Sarah R. Wilmer, was of the family of Samuel Eccleston, fifth Archbishop of Baltimore. A large part of her childhood was spent in Texas where the family owned an eleven league grant upon which the town of Mexia, Limestone County, is now located. She was educated in various private schools and colleges in the United States and Canada and much later specialized in science and botany at the University of California. Some of her early life was spent in Mexico but for the past thirty years she was a resident of San Francisco.

In 1922 she joined a botanical expedition from the University of California to Mexico and in 1925 one from Stanford University. During the following thirteen years she made three expeditions to Mexico, one to Alaska, and two to South America, collecting upwards of 9300 numbers and some 150,000 specimens. Of these there have been described two new genera and about 500 new species, of which more than fifty have been named in her honor. She was collecting in the mountains of Mexico when forced to return home because of illness, and shortly thereafter, on July 12, 1938, she died.

Her most noteworthy expedition was one taken in South America, for the greater part entirely alone, up the Amazon to its headwaters and across the Andes to Peru.\* She left in October, 1929, and returned in March, 1932, collecting 3200 numbers and 65,000 specimens. On another occasion she visited Ecuador and Tierra del Fuego.†

This brave explorer and collector of rare and unknown plants was a warm friend of many of the members of the Sierra Club. Before she started her botanical exploration she went on many Sierra Club outings. These doubtless served to stimulate her interest in botany and on these she gained experience in living in the out-of-doors, a knowledge which later served her well on her many arduous trips of exploration and scientific collecting. That she deeply appreciated the Sierra Club and its aims is evidenced by the fact that her will provided liberally for the Club as well as for the Save-the-Redwoods League, after the termination of life estates in favor of her two half-sisters, Adele A. Mexia and Amanda Mexia de G. Rubio. All who knew Ynes Mexia could not fail to be impressed by her friendly unassuming spirit and by that rare courage which enabled her to travel, much of the time alone, in lands where few would dare to follow.

WILLIAM E. COLBY

\* "Three Thousand Miles up the Amazon," by Ynes Mexia, in *S. C. B.*, 1933, 18:1, pp. 88-96.

† "Camping on the Equator," by Ynes Mexia, in *S. C. B.*, 1937, 22:1, pp. 85-91.

## NOTES AND CORRESPONDENCE



### A RIVERSIDE CHAPTER HIGH SIERRA TRIP

BY MARY SMETHURST

Early last spring Mr. and Mrs. Richard M. Esgate, who had originally planned a trip into the High Sierra as their own vacation, invited members of the Riverside Chapter to come with them. Starting August 6, the first camp was made in Little Lakes Valley in the Rock Creek basin near Mono Pass. The party formed two commissary groups: one, Maryetta and Dick Esgate, Mary Smethurst, Doris Rowlands, Forrest Keck; the other, Louise and Jack Dole, Eunice Reaper, Emerson Holt. There are more than fifty lakes in Little Lakes Valley, and here the group camped for nine days at an elevation of 10,600 feet. Majestic peaks and barren ridges, with glaciers and isolated patches of glistening snow, towered above the blue lakes and grassy meadows. Camp was pitched near Heart Lake on a boulder-strewn slope covered with lodgepole pines. Hikes were made over Morgan Pass to Morgan Lakes, to Ruby Lake, to Mono Pass, and into Pioneer Basin. Dick Esgate, Jack Dole, and Forrest Keck made an attempt to scale Mount Abbot from the north, but in the absence of an expert rock-climber the ascent was considered dangerous and was postponed. Forrest Keck made the top of Mount Morgan (13,739) and found a ten-foot cairn of rocks, but no register. He left an account of the ascent and a description of our trip.

In Tuolumne Meadows the group camped four days near Parsons Lodge, joining the campfires at the Lodge each evening. They were welcomed by the host, Albert Duhme, and met Club members from other chapters. Cathedral and Unicorn peaks were climbed by members of the group. During the stormy afternoon of the Unicorn ascent Dick Esgate and Forrest Keck heard electricity crackling along the ridge, but as their scalps began to tingle and Dick's hair stood on end they did not linger to analyze the spectacle.

The group stayed in Yosemite Valley for two days, finally returning to Riverside on August 21 via the Mariposa Grove of Big Trees. The enthusiasm of the members and the splendid leadership of Mr. and Mrs. Esgate made the trip a grand success.



### BOATING ON LAKE MEAD

BY JAMES N. SMITH

From the jumbled, many-hued hills surrounding Boulder Dam to the stupendous, staggered cliffs and timeless aura of the Grand Canyon, the desert and mountain lover now finds a new world by way of a new entrance. Through this strange desert land and under hanging somber gorges of stratified rock, past contorted travertine side-walls, unbelievably blue Lake Mead twists incongruously until it loses itself far up in the intricacies of the Grand Canyon. To explore and enjoy this region was the recent privilege of a large group



of Southern California members of the Sierra Club. Our first day was spent in boating eighty miles along the lake to the Grand Wash Cliffs, the western portal of the Grand Canyon; and then in following the narrowing waters twenty miles farther into the deep chasm. At dusk we passed below the Muav Caves, former home of ancient Indian tribes, and Rampart Cave, which sheltered the Giant Ground Sloths of 7000 years ago. In an inviting side-canyon we made camp and went to bed by the moonlight reflected from the majestic walls high above us.

Early next morning, from our shadowed retreat we gazed aloft as the sun slowly warmed the subdued coloring of the sandstone walls—red and yellow, alternated with the light green bands of desert vegetation on the ascending benches, all of it at once an indomitable challenge and barrier to exploration. Later, on board boat again, we investigated every labyrinthian tributary canyon on our continued journey up the lake into the very heart of this fascinating country, in the past accessible only by the extremely hazardous boat trip down the river. After floating a hundred feet over the rocks which had formerly formed dreaded Lava Cliff Rapids, we began to feel a strong current from the river above. The water became thick and brown, a faint but persistent murmur swelled into an ominous roar, and we rounded a turn to the sudden spectacle of the tumbling, frothing waters of famous Separation Rapids. With full speed ahead we reached the very foot of the rapid, where we disembarked to obtain a closer view. Our admiration for the brave explorers who had pioneered this river was unbounded, for it was at this rapid in 1869 that Major Powell decided to go on after three of his men deserted rather than face the perils of the river.\*

On the following day we leisurely unraveled our way out of the Canyon, thus ending the first Sierra Club journey of exploration into this wilderness.

\*This implication in Powell's account is an injustice to the three men, according to Stanton. (*Colorado River Controversies*, by Robert Brewster Stanton, 1932.)—Editor.

## MOUNTAINEERING NOTES

### MOUNTAINEERING DURING THE 1938 HIGH TRIP

BY JACK RIEGELHUTH

During the 1938 High Trip the most noteworthy ascents were those of Lyell, the Minarets, the Abbot group and Humphreys. There were in addition many other fine ascents made during the trip, many of them firsts.

*Mount Lyell.*—First major ascent of the trip, climbed July 8 by a new route on the southeast face, Norman Clyde and Jack Riegelhuth, leaders, and Norman McKee, Madi Bacon, Alan Hedden, Bruce Meyer, Tom Noble, Fred Holmes, Minton Evans.

*Banner Peak.*—Climbed July 11 by a large party under leadership of Oliver Kehrein.

*Mount Ritter.*—July 12, traversed from north to south by a two-rope party led by Clyde and Riegelhuth. A book-type aluminum register was placed.

*Clyde Minaret.*—July 13 and 14, Norman Clyde led two parties to the Minaret upon which his name was affixed following his first ascent in 1928.

*Kehrein Minaret.*—July 13, under Oliver Kehrein, a party consisting of Dick Cahill, Jim Harkins, and Fred Holmes climbed Point "C," which, although first ascended August 23, 1933, by Norman Clyde, is named after the leader of a subsequent ascent to avoid duplication.

*Riegelhuth Minaret.*—Point "A" was ascended for the first time July 13 by Riegelhuth (leader), Charlotte Mauk, Josephine Allen, Bill Leovy.

*Turner Minaret.*—A party of three led by Ed Turner made a first ascent of the Minaret north of Point "E" on July 14.

*Jensen Minaret.*—July 14, a second ascent of this Minaret was made by a party led by Richard Riegelhuth.

*Peak 11,115.*—An apparent first ascent of this peak, which lies two miles west of the Minarets, was made July 13 by Kehrein, Cahill, Harkness, Holmes, Frank Aitken, Edwin Koskinen.

*Silver Divide.*—There was no further climbing until July 20, but during the ensuing four days large parties made up for lost time by making nine ascents in the Silver Divide and Mono Recess regions.

*Abbot Group.*—On moving day, July 24, Norman Clyde and John Cahill took a large knapsack party cross country to Hutchinson Meadow. From a base camp at Lake Italy they ascended Abbot, Gabb, and Bear Creek Spire. Severe thunderstorms prevented their climbing several other peaks on their program.

*Mount Humphreys.*—July 28, a party of fourteen left for a knapsack camp from which to make the ascent. The party consisted of five separate ropes under the leadership of Clyde, Harriet Parsons, John and Dick Cahill, and Jack Riegelhuth, with Allan MacRae, Caroline Coleman, Ellen Gammack, Jim Harkins, Tyler Van Degrift, George Wilkens, Bill Leovy, Ralph Arthur Chase, and Bruce Meyer making up the rest of the party. Three ropes took

the regular route; the other two, under Dick Cahill and Riegelhuth, attempted a new route on the west face. This went well until the last pitch, where the leaders, having no pitons, called for a rope from the rest of the group, who were watching from above.

The climbing this year, particularly on the first two weeks of the trip, was quite different from that of recent years due to the large amount of snow. The management found it advisable to conduct lessons in snow technique—glissading in particular—since a general lack of control in snow and ice could become a threat to safety.

#### THE ROCK-CLIMBERS' KNAPSACK TRIP

BY RAFFI BEDAYAN

Standing on Bishop Pass we suddenly realized that our extensive climbing tour of the Palisade region had terminated. Each person paused for a moment and looked back, each enveloped in thoughts of the two weeks that had just passed—days filled with hard packing, fine climbing, other things that had made life really enjoyable. Six months before, the San Francisco Bay Chapter Rock-Climbing Committee, under supervision of the Outing Committee, had appointed Kenneth Davis as leader of the Sierra Club's first Rock-Climbers' Knapsack Trip. With a sub-committee of four other members, Davis worked long and diligently on the plans. On July 30 we met at the North Lake public camp. There were eleven in the group: Kenneth Davis (leader), Renee Godfrey Aitken, Raffi Bedayan, Garniss Curtis, Jane Curtis, John Dyer, William Horsfall, Edward Koskinen, Jack Riegelhuth, Mary Jane Sconberg, John White. We stumbled out of camp with one week's food and equipment secured to pack-frames, the girls carrying 25 pounds, the boys struggling along with loads of 50 to 75 pounds. The first camp was located about a mile and a half beyond Piute Pass.

Up by seven o'clock the next morning we started for Mount Humphreys. Two new routes were explored and climbed. Snow was gone from the gullies, climbing on the talus was very easy, and all parties were off the mountain before dark. Next morning we crossed Glacier Divide by "Alpine Pass," above Muriel Lake, and late in the afternoon arrived at the lower end of Evolution Lake. After climbs of Darwin and Peak 13,701 by some of the party, we crossed Muir Pass. We welcomed a pause at Wanda Lake, where Jack Riegelhuth captured the beauties of Muir Pass and the Black Giant with water colors. We camped at the highest timber on the Middle Fork of Kings River.

Following the ascent by Davis and White of the Black Giant and the apparently unclimbed Peak 12,818, we made short dashes, first to Little Pete Meadow, then to Grouse Meadows, where we found the midway cache in good order although the meadows were flooded. Around campfire that night parties were made up for the Devils Crag. It was heartily agreed (by the

boys) that the girls should be left behind to rest up for the last push into Dusy Basin. Our next campfire, reached by loitering along the route to the Rambaud Creek basin, was really enjoyed by the fellows because the girls were absent. After a frugal breakfast next morning, we were well on our way toward the Crags by five-fifteen. Riegelhuth, Davis, and Bedayan made a new route straight up the face of the highest crag in two hours from base camp to summit. The regular route, along the ridge, was also traversed.

Another day found us in Dusy Basin planning parties for various climbs in the Palisades. Three very active days were spent, the outstanding achievement being a 13-hour traverse by Davis and Riegelhuth along the arête from Mount Winchell to the North Palisade U-Notch, including a new route up Mount Winchell.

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#### CLIMBING IN YOSEMITE VALLEY

BY RICHARD M. LEONARD

The annual trip of the Rock-Climbing Section to Yosemite Valley had become increasingly popular not only to rock climbers but to other members of the club as well. Participation had increased from a handful on the first trip in September 1933 to over 75 in May 1937. The burden was becoming too great for the Rock-Climbing Committee to handle without special equipment. Accordingly Oliver Kehrlein and I, being on both the Outing Committee and the Rock Climbing Committee, concluded that it would be logical to turn the management of the trip over to the Outing Committee which was fully prepared with experience and equipment to provide for such numbers and even a considerable increase. The Outing Committee was glad to accept the responsibility, feeling that the trip should be made available to the entire membership of the club as an opportunity to become better acquainted with one another and to enjoy the Yosemite Valley at its best. An energetic sub-committee, under the leadership of Frederick Peake, planned for 150, talked about the possibility of 200, cut off applications at 350 and finally had nearly 500 camping together in the Valley. In camp, at meal times and around the campfire, it was real fun to be able to greet so many of one's friends and to meet new ones. During the day one usually saw only the close friends with whom one was walking or climbing. One can have many companions at campfire and still find solitude and wilderness on the trail.

It might be supposed that with such a large party rock-climbing would suffer. Actually this was not so, for 67 active members of the three rock-climbing sections of the club participated, compared with a maximum of about 40 on any previous trip. Through the generous volunteer leadership of the more experienced climbers, for which the High Trip is famous, many members of the club who had never had the opportunity of enjoying mountaineering were enabled to participate in some of the joys of the sport, as, for example: Oliver Kehrlein's party of 32 to the summit of the Highest Cathedral Rock, six of whom had also a real taste of adventure by climbing

to "First Base" on the Higher Cathedral Spire; Glen and Muir Dawson's repeated ascents of Washington Column for the training of those less experienced; the party of seven who took me on my fourth trip to the Diving Board; and the generosity of Raffi Bedayan and Bill Hewlett in spending most of the last day in instructing beginners at the Indian Caves.

Outstanding climbs were as follows:

*Split Pinnacle.*—Although only a minor and rather inconspicuous pinnacle rising 300 feet from Eagle Creek, it is remarkable in that the formerly inaccessible higher pinnacle of its twin summit is overhanging on all sides. These overhangs had blocked the efforts of four different parties of experienced rock-climbers who had attempted the summit. On May 28, 1938, a first ascent was accomplished. Jack Riegelhuth, from a shoulder-stand, placed three pitons in a crack on a 25-foot face of 105 degrees. Using these as direct artificial aid because of the lack of holds on so severe an overhang, Raffi Bedayan led, followed by Muir Dawson, Riegelhuth, and Leonard. Colored movies of four unsuccessful members of the party as they each fell from the overhang (belayed from above) give a spectacular story of the difficulty of the ascent. It should be considered as a short sixth class climb.

*Diving Board.*—A new route was developed on May 29 by Kenneth Davis and Kenneth Adam on the northwest spur of this massive buttress of Half Dome. Climbing rapidly they covered 2500 feet of bush-whacking and 500 feet of fourth class climbing in three hours.

*Lower Brother.*—An attempt by Carl Jensen and Tom Johnston on the fifth class arête was blocked by difficulty. The following day, May 28, Tom, with Harvey Dowling and Don Woods, made the ascent by Michael's Ledge on the east face.

*Arrowhead.*—Jules Eichorn, Jack Riegelhuth, and Ted Waller made the third ascent of this interesting pinnacle May 29.

*Washington Column.*—This popular fifth class climb was again made by the route of the second ascent. The climbers were Glen Dawson, Homer Fuller, and Wayland Gilbert on May 28.

*Taft Point.*—May 29, Rolph Pundt, Carl Jensen, and Alan Henry did some original exploration in this relatively unknown area. They ascended about 300 feet of the face but were stopped by high angle and lack of holds.

*Cathedral Chimney.*—After six unsuccessful attempts by good parties, the first ascent of this severe fifth class route was accomplished in three and a half hours in October 1936 by the very expert party of David Brower and Morgan Harris. May 28, this year, Kenneth Davis, William Hewlett, and Ned Flanders accomplished the even more difficult ascent under spring conditions. Due to running water their route was on small holds on the high-angle north wall about 200 feet out from the slippery stream bed.

*Kat Walk.*—This route is named for William Kat who did so much of the early climbing in Yosemite and is supposed to have climbed the Middle Cathedral Rock by this means. The route traverses from midway up the Cathedral Chimney northeast along a brush-covered ledge and on up the broken north face. It was repeated, May 28, by Howard Koster, Jim Smith, and Ralph Yearly.

*Lower Cathedral Spire.*—Two expert parties made the ascent, May 29 and 30. Raffi Bedayan, William Hewlett, and Howard Koster in the first party, and Ted Waller, Glen Dawson, and Homer Fuller the next day.

*Grizzly Peak Chimney.*—Searching for an approach to Grizzly Peak that would be easier than the conventional Le Conte route, Morgan Harris and David R. Brower ascended the south chimney, leading to the east notch, on June 7. Approaching by the abandoned MacCauley trail (below Vernal Fall), working upward on exposed ledges and eastward into the chimney itself, they soon found that what had appeared a third class climb from the trail was actually difficult fourth class, with one fifth class pitch.

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#### A NOVICE ON THE EAST FACE

BY AGNES FAIR

East Face Lake sparkled in the sunlight 1200 feet below. The block of gray granite upon which I stood was a mere wrinkle on the towering, precipitous East Face of Mount Whitney. It was quite a sensation for a novice. The shattered blocks and tremendous spires of granite had appeared almost impossible as they rose dizzily above our camp by the lake, yet here was our party of two girls and nine men moving fly-like up those great cliffs. Climbing confidently and steadily up an almost vertical face of rock that had looked ominously smooth and steep from below, I marveled at the fact that the novice climbers out-numbered the experienced mountaineers. It was a comforting feeling to know that, if I should slip from my inch-wide holds, loss of pride would be my most serious injury. The rope, tied around my waist and held lightly but firmly by the leader, was full protection against a disastrous fall. As obstacles were surmounted, the leader's approving glance indicated that I conquered a difficult pitch creditably, and my spirits rose still higher. With two pitons driven into the rock above, we guarded the leader with our rope as he climbed. My subconscious mind drifted back over my training, which had begun only four months before—belaying, holding falls, balance climbing, piton technique. Practice climbs had become more and more difficult, and only those who could conquer "Angel's Fright" and "Fingertip Traverse" at Tahquitz were permitted on this climb of the East Face. Forbidding precipices can become quite friendly when one has the key—thorough training in basic rock technique. I had attended my first practice climb with the Rock-Climbing Section largely out of curiosity, but it was not curiosity that took me back again and again. It was realization of the exacting preparation required, the good fellowship of climbers and campfires, and a new love of the great mountains.

Members of the regular Labor Day Outing, who had ascended Mount Whitney by the trail, peered down the cliffs at our progress. The last obstacles fell rapidly, and we suddenly emerged upon the summit, 1300 feet above our camp.

## A TRIP IN THE SIERRA

By R. S. FINK

With the twofold objective of enjoying the mountains and of checking summit-records, I started up Tuttle Creek on July 14, 1938. Although a sixty-pound pack bore heavily, the thought of the beauty ahead urged me onward to a campsite at 9500 feet. The early morning found me climbing up the north face of Mount Langley. Although many times the route apparently ended, there was always an opening that took me nearer the summit, but it was 8 o'clock when I finally arrived so that it was necessary to stay on the summit overnight. Cold made sleep impossible, so I set myself to stamping and tramping throughout the night to stimulate circulation. Speculation upon the hour and point at which the sun would appear helped to pass the time. With a bright day dawning, I started toward Peak 12,819, where I found a small register. By nightfall I was back at base camp to rest for the hard climb over the ridge to Rock Creek.

Most of the next day was spent crossing to timberline at 11,200 feet, where a base camp was made for the next several days. Peak 12,784 was ascended by the south face, with some difficult climbing. The following day Mount Le Conte was chosen as the objective. From the top of a mile-long couloir west of the Crest, I traversed north along a band of reddish porphyry to an arête which led over a difficult slab to the summit. Then, by working south along the Crest, the next main peak (13,800 plus) was reached. The descent was made by a chute just north of the peak.

July 19 I ascended a long couloir west of the Crest between the second and third peaks south of Mount Le Conte. Working back and forth along the Crest and descending by the chute between the third and fourth, ascents were made of peaks 13,733, 13,600 plus, and 13,400 plus. Peaks 13,160, 13,481, 13,484 and 13,124 were undertaken as a one-day trip and were made without great difficulty, although a storm on the last summit was very trying and several rope-downs — one over a sixty-foot overhang — were involved.

Mount Irvine and Mount Mallory were climbed from Arc Pass while base camp was being moved to Mirror Lake. I went up Mount Muir and Mount Whitney before going down Lone Pine Canyon and over the desert to Tuttle Creek. So ended another vacation in the High Sierra — sixteen peaks in eleven days.

## BOOK REVIEWS

WILLIAM KEITH. *THE MAN AND THE ARTIST*<sup>1</sup> A certain bay-windowed house in pre-earthquake San Francisco, outwardly like a thousand others, to me spelled Paris, London and Rome in one. Not only

because of guests associated with it: Frank Norris, Gelett Burgess, Margaret Anglin, Franklin Lane. Brilliant people could inspire a school-girl with terror as well as fascination. Because too of paintings that hung on its walls, the first that I ever really looked at, really loved. Of one in particular—a grain field in the warm yellow browns that succeed California's green, a blue shoulder of Diablo, glowing ambient heat: June heat in the Contra Costa. The picture, unlike the Roman Chariot Races and Stags at Eve and Maidens at Prayer that graced most walls of the period, expressed a feeling, my own special feeling for California. Perhaps even to the more sophisticated habitués William Keith's sunny fields or dim woods then seemed Abstraction itself.

Those days, "characterized by many crudities," days, Mr. Neuhaus holds, "of few cultural outlets," are long past, and only the most fanatical of Keith devotees will quarrel with Mr. Neuhaus in his Romanticist classification, or in any of his critical estimates of "the Artist." Where Keith's work is in question Mr. Neuhaus is always just and sympathetic. The slow development of the painter from "recorder . . . of obvious, commonplace facts of nature" to "skilful and imaginative interpreter of her more intimate moods" is admirably presented and never distorted in its perspective by the author's own predilections. The few pages devoted to Keith's painting technique add greatly to the layman's interest. The illustrations are well chosen and beautifully reproduced; the printing and make-up of the volume worthy of the occasion it celebrates—the centennial of Keith's birth. But the biographical part of the book will disappoint many of William Keith's friends. Mr. Neuhaus gives all the facts, documents them with extracts from letters, yet nowhere in his colorless presentation of "the Man" do I find any real evocation of a personality as well known in San Francisco and even more beloved than his paintings were.

My own contacts with Mr. Keith were few, brief, confined to the last three years of his life. Yet he remains an outstanding figure in my mind, a richly companionable, sympathetic person whose "position as a successful man" counted for little beside his vibrant human qualities. My visits to his Post Street studio, though varying in detail, always followed a certain pattern. John Muir had come to town. At a Berkeley breakfast table his hostess, torn between his assumption that the meal would last as long as the conversation and the need to get the breadwinner released in time for the last possible business train, contrived, along about eleven, to start Mr. Muir on the same

<sup>1</sup> *William Keith. The Man and the Artist.* By EUGEN NEUHAUS. University of California Press, Berkeley, California. 1938. xi+95 pages, illustrations. Price, \$1.50.



path toward a lunch table at Tait's. To more conversation, and under cover of the jazz singer's entertainment, to Mr. Muir's sotto voce imitation of the loon's doleful cry which, he claimed, was her lament as well. Then to the studio, where, after all this leisureliness, it was as if we had passed from the pace of those times to the pace of today. The shaggy old man sitting tensely busy before an easel made no such concessions to a geologist's tempo as the rest of us were accustomed to do. "Here, Johnny!" he briskly hailed him. "What do you think of this?"

As Mr. Neuhaus hints, Muir's quarrel with Keith's art was that it was not literal enough, especially where the beloved mountains were in question. There were some tamperings with nature that he bore with equanimity. Indeed one of his favorite Keiths was an apotheosis of all oak groves that must have greatly tried him as a botanist. But "this" was a mountain scene. "It's ridiculous, Willy," he said. "Look at that watershed. Look at those snow-fields. And a trickle of water that I could step across! Ridiculous."

He turned his back then, crossed to a table, sat down and began to read. Mr. Keith, with a grin at me, took a liberal brushful of white and began to paint a flooding stream. Presently, "Come, Johnny," he called, "how's this?"

Mr. Muir crossed the room again, peered over his spectacles. "What's the hump in the middle of the waterfall?"

"Hump, Johnny! That's a boulder."

"Never could stay there with that force of water behind it," the critic said, and returned to his book.

Again an interval, the painter very industrious. "Now, Johnny!" he commanded, and obediently Mr. Muir rose to look. This time he approved.

"That's more reasonable." And after watching the brush at work, "You know, Willy, I think if I'd spent as much time messing with paint as you have, I could have been an artist myself."

"Not you! You lack—you lack wildness!" his friend said, and paid no further attention to us. But as we left, he called me back from the door. "It did improve it!" he muttered, his brush lifted to warn me that Mr. Muir was not to be told.

As Mr. Neuhaus says, biography should not be "tinctured with romantic figments incompatible with the facts," or the quality of an artist's work be entrusted to the judgment of his friends. William Keith's place as an Artist must be left to the test of time, perhaps to an epoch even more removed from his than this intervening quarter century. But the estimate of the Man can be justly made only by some one intent on recapturing the spirit of the subject's own times and the influence he exercised on his contemporaries. As I read this inanimate life story I found myself recalling a group photograph taken on the 1902 Outing—wishing that among the early Sierrans who enjoyed the companionship of Keith and Muir and Hittell some one might be inspired to parallel this book by one much more intimate. Some one who would write of William Keith with a keener realization of him as a character outstanding in his own times, invaluable to them, even if as alien and "sentimental" in ours as a Keith landscape in a gallery of Modern Art.

MARION RANDALL PARSONS

**INTERNATIONAL SKIING**<sup>2</sup> This book represents the last word in the glorification of skiing. It is the kind of a book a male skier should present as a supreme token of devotion to the feminine enthusiast who is teetering on the brink of accepting his proposal of marriage.

The subject matter is presented in a preface by the editor and 21 chapters written by a number of the most prominent persons connected with the sport. The table of contents is as follows: The Origins of Skiing, by Arthur Zettersten; The International Ski Federation (F. I. S.), by Major N. R. Oestgaard; The Olympic Winter Games, by Count de Baillet Latour; The National Ski Association of America, by Roger Langley; History and Development of Skiing in America, by Charles N. Proctor; Controlled Downhill Skiing, by Richard Durrance; The Development of the Ski School in Austria, by Hannes Schneider; Ski Instruction in Switzerland, by Christian Rubi; "Too Damn Stupid . . .," by Luis Trenker; Easter Trip to the Wildspitze, by Luis Trenker; Downhill Racing, by Arnold Lunn; History and Development of Ski Racing, by Carl J. Luther; Ten Years of Ski Racing for Women, by Alice Damrosch Wolfe; Training for Ski Racing, by Peter Lunn; Ski Jumping, by Birger Ruud; Cross-Country Skiing in Finland, by Armas Palamaa; Ski Mountaineering, by Dr. H. Hoek; The Nature of Snow and the Influences of Wind and Weather, by Gerald Seligman; The Ski, by Thor Tangvald; The History of the Binding, by Adolf Attenhofer; Canadian Skiing, by H. P. Douglas.

The chapters contain a well distributed variety of material. The discussion of cross-country racing technique in Finland is the kind of contribution of which we stand in great need. For ordinary touring, which, for most of us in the West is the final goal of skiing delight, effective propulsion across country is more important than high speed turns. The chapter by Durrance represents, I know from conversations with dozens of them, the opinion of many downhill racers who hesitate to say so themselves for fear of being considered "yellow." The historical sections are interesting and authoritative, although the remarkable development in early California which has just come to light is not included. The chapters on ski mountaineering and on snow are of great interest to those who like to get out of sight of the ski lodge and on the practice slope.

The book is profusely illustrated with photographs, of personal, geographic, or historical interest, many having great artistic value, as well as by etchings and color plates, from water color and oil paintings, which appeal alike to the love of artistic beauty and of nature in her winter garb. The reviewer resists the temptation to mention the illustrations which have for him a particular appeal—after all, each person has the right to his own taste. One can, however, state with full confidence that anyone who could find but little to admire in these illustrations would be a person to pity.

The work is dedicated, most appropriately, to Hannes Schneider, who has undoubtedly done more than any other man, not only to advance skiing

<sup>2</sup> *Skiing, the International Sport*. Edited by ROLAND PALMEDO. Derrydale Press, New York. 1937. 221 + 328 pages. Deluxe edition of 60 copies, \$100.00; regular edition of 950 copies, \$35.00.

technique and develop effective methods of instruction, but, more important still, to foster the fine sportsmanship and spirit of goodwill between skiers which pervade this sport more than any other.

JOEL H. HILDEBRAND

#### ABC OF

#### DOWNHILL SKIING<sup>3</sup>

A practical little book of less than 100 pages, this approaches the technique of skiing from a viewpoint opposite to that of most other manuals. Mr. Chambers, attorney and amateur, assumes the attitude of the student rather than the teacher. Each movement is so taken apart and broken down that it may be practiced in one's bedroom, thus to become a subjective part of one's mental equipment before being tried on the ski slopes. It is pocket size, with a waterproof cover, and when damaged or soiled can be replaced at a nominal cost of 25 cents.

OLIVER KEHRLEIN

#### PAN-AMERICAN SKI CHAMPIONSHIPS<sup>4</sup>

The story of the United States team's participation in the Pan-American Ski Championships in Chile, from the time it left the New York pier until the return; description of skiers on board an ocean liner; their reactions to the various stops in the Canal Zone and on the western South American coast—these furnish good reading for everyone. Of special interest to the ski enthusiast are the chapters devoted to the history of Chilean skiing and the account of the actual ski meet at Cerro Colorado, in Chile, which took place in July, 1937. One chapter devoted to ski equipment will educate the novice and provide the advanced skiers with many nuts to crack around winter fires. Mr. DuBois presents a worth while bit on the art of ski photography.

MARY M. MYERS

#### SKIING

In the introduction to this booklet the publishers say that America FOR FUN<sup>5</sup> has tended to take its skiing too seriously, but now it's time to cavort around and have some fun. They proceed to give many ingenious ways of doing so in thirty-five pages of fun and nonsense, well illustrated with animated stick-figures. When you've played these games a few times you should be an expert on skis—if you're still alive.

ROSA M. SELLE

#### FACETS OF

#### YOSEMITE<sup>6</sup>

During her brief first and only visit to Yosemite Mrs. Stallings' sympathetic glance penetrated beneath the surface. Deeply moved, she has turned to verse for communication and, although previously inexperienced in the use of this medium, has produced some de-

<sup>3</sup> *The A B C of Downhill Skiing*. By WILLIAM E. CHAMBERS. E. A. Wright Co., 2340 Lincoln-Liberty Bldg., Philadelphia. 1937. 96 pages. Price, 25 cents.

<sup>4</sup> *Ski and Andes*. By EUGENE DUBOIS. Blanchard Printing Co., Boston. 1937. 80 pages. Price, \$1.50.

<sup>5</sup> *Games to Play on Skis*. By FRITZ HEINRICH. Translated from the German by Dinmore Adams. Stephen Daye Press, Brattleboro, Vt. 1938. 40 pages.

<sup>6</sup> *Facets of Yosemite*. By FRANCES OSBORNE-STALLINGS. Printed by Victor Hillis and Son, San Jose. 1938.

lightful "tabs for the memory." The most frequently visited spots are all remembered, as are the naturalists and the trail builders. The author herself would not claim that the "Facets" are great poetry. But collectively they comprise a souvenir of merit, in which sentimentality is avoided and a homely realism attained.

ELMO A. ROBINSON

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**ARLBERG** With so many books on ski technique having appeared in recent **TECHNIQUE**<sup>7</sup> years it is difficult for the novice skier to make a selection. Casual browsing would indicate that no two advocate the same procedure. There has, however, been consistency in teaching of the Arlberg Technique by the methods of Hannes Schneider. As an instructor from one of the several American ski schools where the Hannes Schneider technique is now taught, Benno Rybizka has written a lucid explanation of the technique. With a valuable introduction on equipment Rybizka proceeds to describe the motions natural to the progression of turns, leaving the mechanical intricacies of each maneuver to those engrossed in the physics of the sport. For indeed, the Schneider method is not to analyze centrifugal force and center of gravity of given bodies, but rather to extend into skiing the human reflexes that are already conditioned to physical laws. Skiing and walking are, after all, related. Many good illustrations supplement the complete text. Descriptions do tend at times to be a bit wordy; the terms "inside ski" and "outside ski" are so used that they might confuse. The format has been designed for library use, not field work; but then, carrying a ski manual on the slopes might well be considered to be "munching buttercups in the clover field." The author's pleasing objective attitude throughout the book is well epitomized in the conclusion:

"We want to teach you your turns, to take you with us up to the glorious mountains, to have you sit with us on the summit, to have you gain new force and happiness, to take back a few rays from the sun for the coming days."

DAVID R. BROWER

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**SKI SCHOOL BY** The literature of ski technique has in the past consisted of **PHOTOGRAPHY**<sup>8</sup> text supplemented by illustrations. Now we have a book of ski instruction in which the reverse is true. With an ingenious layout by Walter Herdeg and film-strip illustrations and captions by Dr. Walter Amstutz, it is now possible for the beginning skier to study all aspects of the sport, from equipment to *galandesprung*, without knowing how to read. To quote from the foreword, "In this little book the talk of the film is the letterpress and the pictures analyse each movement in all its essential phases with the advantage that any individual detail can be studied at leisure." The book succeeds admirably in its purpose: that there should be no instruc-

<sup>7</sup> *The Hannes Schneider Ski Technique*. By BENNO RYBIZKA. Harcourt Brace & Co., New York. 1938. xv+109 pages, illustrations. Price, \$2.50.

<sup>8</sup> *Skiing from A-Z*. By DR. WALTER AMSTUTZ. Oxford University Press, New York. 1939. 92 pages, of which 76 are illustrations.

tion without its proper picture. One should not, however, take the skiing form pictured too literally in all cases. As all ski photographers will agree, there are times when the still camera gives a harsh analysis of what might have seemed to the eye a perfect turn. Some of the errors thus revealed in the illustrations are not always corrected in the captions. The reader might also hope for the day when ski-terminology is somewhat standardized; for although it will be a sorry situation when everyone agrees, it is still apt to confuse the novice to find in this book reference to the Christiania as a steered turn, to the Telemark as a swing, while in other books he finds these definitions exactly reversed. Such criticism must be subordinated, however, to the general effectiveness and excellence of the layout and succinct style.

DAVID R. BROWER

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**ESCAPE ON SKIS** Brian Meredith's delightful volume, *Escape on Skis*, tells first of skiing in the Canadian Rockies, covering the country around Skoki Valley, Lake Louise, Mount Assiniboine, and Sunshine Camp. This part of the book is diluted with those rambling dissertations on personal reactions which usually attack skiers. Mr. Meredith further digresses by relating the story of the second ascent of Mount McKinley, as told by Erling Strom, one of the climbers. All in all, the first part of the volume, called "Young Man Gone West," is as satisfying as an evening spent in a ski hut.

"Young Man in Switzerland," the other half of the volume, is equally interesting. It deals with skiing and puttering around such places as Gstaad, Adelboden, Zermatt, the Bernese Oberland, the Jungfrau, Andermatt, Davos, and St. Moritz. The author frequently leaves the main trail, telling of avalanches, their dangers, how to handle them, and so on. And here again Mr. Meredith reverts to his impressions, which prove to be enchanting, and yet they are unusual in a book on skiing. Finally, with a "wherethehellwuzzi," he goes back to skiing and promptly takes a side road to pass on to the reader the fascination which is Arnold Lunn.

A wholesome love of life, an appreciation of the kindly, quiet people of the mountains, an ability to perceive everything, large and small, in the world of the skier — these are the qualities which make Brian Meredith's book interesting reading.

MARY MYERS

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**ALBUM OF A MOUNTAINEER**<sup>10</sup> Very often the attempt to repeat a success is disastrous, and, upon first hearing of a companion volume to Smythe's *The Mountain Scene*,<sup>11</sup> one might hastily conclude that the beautiful photographs presented therein would have exhausted the photog-

<sup>10</sup> *Escape on Skis*. By BRIAN MEREDITH. Dodge Publishing Company, New York. 255 pages, illustrations. Price, \$3.00.

<sup>11</sup> *Peaks and Valleys*. By FRANK S. SMYTHE. Adam and Charles Black, London. 1938. 136 pages, 76 reproductions of photographs by the author. Price, 12s. 6d.

<sup>12</sup> *The Mountain Scene*. By FRANK S. SMYTHE. Adam and Charles Black, London. 1937. ix+153 pages, 78 reproductions of photographs by the author. Price, 12s. 6d.

rapher's best work. This is certainly not the case. *Peaks and Valleys*, containing another fine selection of photographs of the Alps and Himalayas, is every bit as worthy as the similar book preceding it. As the title indicates, there is in the latest work more emphasis on mountain valleys, particularly in the Himalayas, which should please those who have felt that past volumes on this greatest of mountain ranges have slighted the beauties of less famous regions by over-emphasizing the great peaks. Reproduction of photographs is as fine as has been found in any British mountaineering books. If there is any weakness in the presentation, it is in the detailed captions for the photographs, where space might better have been devoted to the mountains in the photographs rather than to the photography of mountains. Of the mountains themselves few can write as authoritatively. In his foreword Mr. Smythe freely (and perhaps over-modestly) confesses to deficiencies in photographic technique; this is hardly consistent with the several discourses on mechanics and composition which follow. Judging by the fine standards otherwise persisting into the present work, however, the author is still, perhaps, withholding some fine photographs for future albums. For the benefit of mountaineering libraries it is hoped that this is true.

DAVID R. BROWER

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**SKIING FOR ALL**<sup>12</sup> Combines concise and humorously written description of ski technique with a complete glossary of ski terms and an excellent bibliography of skiing publications.

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**SKIING IN SWITZERLAND**<sup>13</sup> Contains a detailed analysis of the mechanics of skiing and valuable notes on ski-mountaineering equipment. Illustrations are poor.

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**JOHN MUIR: A PICTORIAL BIOGRAPHY**<sup>14</sup> This compilation of some of Muir's sketches, notes, and early photographs, assembled by the pupils of the John Muir School in Seattle, Washington, is a charming commemoration of the John Muir Centenary.

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**UP TO THE CLOUDS ON MULEBACK**<sup>15</sup> The Sierra Nevada has been described by explorers, scientists, historians, poets and photographers. It has remained for Mr. Kellogg to describe it with the viewpoint of a "dude." Coming west to Yosemite with his family, he ventures

<sup>12</sup> *Skiing for All*. By OTTO SCHNEIER. Leisure League of America, New York. 1936. 95 pages, with line drawings by the author.

<sup>13</sup> *Skiing in Switzerland*. By WILLIAM DUBB and FRED JENTZ. Arthur Barron Ltd., London. 147 pages, with many illustrations. Pocket-size. Price, 3s, 6d.

<sup>14</sup> *John Muir: A Pictorial Biography*. A limited edition of 300 copies.

<sup>15</sup> *Up to the Clouds on Muleback*. By CHARLES W. KELLOGG. Printed in the David Hale Fanning Trade School for Girls, Worcester, Mass. 1938. 157 pages, illustrations.

into the Yosemite High Sierra on a six-day saddle trip through the high camps. The first encounter with mass handling of tourists inspires humorous cynicism, the precipitous zig-zags of the trail frighten him, the mules — well, they aren't exactly comfortable. But as the hero always wins out in the end, so the lure of the Sierra overcomes his skepticism, and he returns home singing its praises. Best evidence of the sincerity of the little book is the book itself, purely a labor of love, printed by his students. There is no attempt at profoundness, no attempt at any time to be serious; the illustrations are the same as the snapshots you and I would take from the back of a vibrating mule. The beauty of the story is its complete simplicity, and the author's delightful, salty humor.

DAVID R. BROWER

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**SNOW STRUCTURES AND SKI FIELDS**<sup>16</sup> This book is interesting not only for its contents but also because it demonstrates a method by which an amateur may write an authoritative scientific treatise. The author, a noted skier and mountaineer, equipped with a scientific mind but without formal scientific education, has utilized a lifetime of Alpine experience and a number of years of patient study to formulate the conclusions set forth.

Recognizing the danger of the amateur drawing false conclusions from observed data, he secured the thorough-going criticism and collaboration of the most noted British scientists in the fields of meteorology, physics, crystallography and glaciology. The result is excellent; technical accuracy is secured without ponderosity; snowcraft problems are treated from the viewpoint and in the language of the skier; illustrations, rather than wordy descriptions, are used to picture the various phenomena of snow.

The book discusses the many types of snow and snow deposits and the methods of their formation. It traces, with a wealth of microphotographs, the evolution of the snowpack from fluffy flakes to glacial ice and deals with the factors that control this evolution.

Having educated the reader into the technical mysteries of snow, the author launches wholeheartedly into his central theme, the causes and avoidance of avalanches. The analysis of the relative importance of the factors of slope steepness, anchorage, convexity of slope, stratification, snow age, moisture content and crystalline structure cannot help but present to the reader with a fair background of snow experience a sound basis for determining the existence of avalanche danger on any questioned slope. It is for this reason that the articles by the same author and covering the same subject matter which appeared several years ago in the British Ski Year Book have been made compulsory reading for the Sierra Club's test of "Ski Mountaineer."

The book should be on the "must" list of every skier whose wanderlust carries him off the beaten slopes, or whose intellectual curiosity extends beyond the boards and waxes underfoot.

BESTOR ROBINSON

<sup>16</sup> *Snow Structure and Ski Fields*. By GERALD SELIGMAN. The Macmillan Company, New York. 1936. x+555 pages. Price, \$9.00.



**BIG TREES, A** Big Tree literature first took its material from the Calaveras New Edition<sup>17</sup> Grove, then switched to the Mariposa Grove, and finally looked to the great groves farther south, of which the Giant Forest is the most notable example. Judge Fry and Colonel White naturally turn first to the Giant Forest, for that is their own habitat, but they are rather more conscious of the other fellow's territory than most of their predecessors have been in writing of the *Sequoia gigantea*. First published in 1930, this book has established itself as the foremost work on the subject. With some additions and a small amount of revision, it now appears in a new edition and serves its purpose better than ever.

FRANCIS P. FARQUHAR

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**INTERPRETATIONS OF A** I have purposely selected as the catchword for this **MOUNTAIN LANDSCAPE**<sup>18</sup> review the subtitle of Dr. Fryxell's little book, for it seems to me that his interpretations transcend in interest even so fascinating a subject as the Tetons. "True appreciation of landscape," says Dr. Fryxell, "comes only when one is alive to both its beauty and its meaning." He goes on to give a remarkably clear and concise account of the building of the range, the records written in stone, the glacial experience, and "landscapes in the making" through such agencies as rock-falls, avalanches, snow and rainfall, and concludes with an emphasis on beauty, in a chapter on "Teton Clouds and Shadows." The illustrations, admirably produced, should arouse in every lover of mountains a desire for close acquaintance with the Teton region.

FRANCIS P. FARQUHAR

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**WY'EAST** The title, "Wy'east," chosen by Mr. McNeil for his biography of Mount Hood, is derived from the Klickitat fire (MOUNT HOOD)<sup>19</sup> legend which constitutes the opening chapter of the book. From this legendary period to the latest ski meet at Timberline Lodge, Mount Hood has had an interesting history. Vancouver's men named it in 1792. Lewis and Clark, Peter Skene Ogden, Nathaniel Wyeth, Frémont, recognized it from far and near as a landmark. As with so many other great mountains, there has been controversy over the first ascent, but Mr. McNeil considers that the party of 1857, rather than that of 1854, should have the honors. In the 1880s there was much ado about illuminating the summit on the Fourth of July. In 1894 the Mazamas formed their organization on the summit. There have been races to be first on top on New Year's Day. There have been mass-ascents by small armies of climbers up the standard routes, and brilliant performances by Wy'easters on routes of extreme difficulty. Two notable

<sup>17</sup> *Big Trees*. By WALTER FRY and JOHN R. WHITE. Revised Edition. Stanford University Press. 1938. xvi+126 pages, illustrations. Price, \$1.50.

<sup>18</sup> *The Tetons*. Interpretations of a Mountain Landscape. By FRITIOF FRYXELL. University of California Press, Berkeley. 1938. xiv+77 pages, illustrations, map. Price, \$1.50.

<sup>19</sup> *Wy'east "The Mountain."* A Chronicle of Mount Hood. By FRED. H. MCNEIL. The Metropolitan Press, Portland, Oregon. 1937. ix+244 pages, illustrations. Price, \$2.50.



chapters deal with Mrs. Langille (Tantsana) and the hey-day of Cloud Cap Inn, and with Elijah Coleman's thirty-one years of guiding.

Mr. McNeil speaks modestly of himself as "the old newspaperman who accepted the assignment to grind out this volume." Whoever made the assignment assigned well, for it is a first-rate job with all evidence of grinding thoroughly polished off.

FRANCIS P. FARQUHAR

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SIERRA NEVADA  
BY ANSEL ADAMS<sup>20</sup>

For a decade or more the *Sierra Club Bulletin* has been enriched by the numerous reproductions of Ansel Adams' photographs. In turning the pages of the present number some one may wonder why there are no representations of his work. Has anything happened? No, Ansel is still very much alive and still very much in the good graces of the Editor, and, it may be added, the *Bulletin* is still in full favor with Ansel. The fact is, Ansel is merely on leave of absence from these pages — a sort of sabbatical year, which he has devoted to the fulfillment of a long-cherished desire.

Several years ago Ansel Adams came to the conclusion that he could not pursue both music and photography professionally at the same time. On the brink of a career as a pianist, and perhaps as a composer, which no one who knew him doubted would be distinguished, he transferred all his energies to the art of photography. In a remarkably short time he had acquired a mastery of technique that placed him in the very front rank in that respect. At the same time he worked out for himself certain principles and criteria of his art, the application of which was soon apparent in an increasing number of subjects so unmistakably his own that in any collection of contemporary photographs no labels were needed to identify the work of Ansel Adams. He became interested in making his own interpretations of the things around him, and, as Yosemite and the High Sierra was and has continued to be the dominant experience of his life, it is that experience which he has chosen to project for us in his first great synthetic production.

The happy result is now before us, for our æsthetic enjoyment and for a release — available at any moment — from confusion, doubt, or depression. For, here, in bright light and in rare clarity, is to be found the very essence of the Sierra. There is the strength of granite, the purity of water, the loftiness of cloud form, the softness of mountain meadow, the vigor of tree form, the cleanness and sureness of every element. In Ansel Adams' own words, it is "the emotional interpretation of the Sierra Nevada — the revelation of the beauty of wide horizons and the tender perfection of detail" that is "the prime function of the present work." One should read with care his two-page foreword, for not only is it an artist's self-appraisal, but it is also a key to the understanding of mountain landscape. It concludes with the artist's summary of his purpose: "This work, then, is a transmission of emotional experience — personal, it is true, as any work of art must be, — but inclusive

<sup>20</sup> *Sierra Nevada. The John Muir Trail.* By ANSEL ADAMS. The Archetype Press, Berkeley, 1938. Foreword, 50 plates from photographs. Size, outside covers, 17 x 13 x 1 1/4 inches. Price, \$15.00.

in the sense that others have enjoyed similar experiences so that they will understand this interpretation of the intimate and intense beauty of the Sierra Nevada." The book is appropriately dedicated to the memory of Walter A. Starr, Jr.

There are fifty scenes, in all, arranged to follow the John Muir Trail from north to south. There is first a key-note picture—two climbers silhouetted against lofty clouds—followed by six views in the Yosemite Sierra, fifteen in the San Joaquin Sierra, eighteen in the Kings River Sierra, nine in the Kern River Sierra, and one in the Kaweah River Sierra. The reproductions are made with such fidelity that only by close scrutiny can the fine half-tone printing be distinguished from photographic prints. For this achievement credit is due to the careful work of the Lakeside Press, of Chicago. Especially distinguished are the typography and the design of the book, the product of Wilder and Ellen Bentley, of The Archetype Press, Berkeley.

FRANCIS P. FARQUHAR

THE MOUNTAIN WAY: Those who have read Mr. Irving's *Romance of AN ANTHOLOGY*<sup>21</sup> *Mountaineering* will rejoice at the news that he has made an anthology of passages from the literature of mountains and mountaineering. In the former work there was evident a rare combination of the experience, knowledge, and understanding of a mountain-climber with literary ability of a high order. In *The Mountain Way* we recognize at once that here is no ordinary compilation of favorite quotations, but, rather, a synthesis of thought and emotional expression constituting in itself an artistic achievement of singular beauty. Mr. Irving has brought about this result partly by the discriminating selections he has made and partly by their arrangement. There are seven sections: *How Men Have Looked at It; How they Have Followed It; A Way of Change; Its Halting-places; Its Warnings; Men of the Mountain; Visions Near and Far*. For each section there is a brief introduction; and, in any future anthology of mountaineering it will be necessary to include passages from these introductions.

It is customary, in reviewing anthologies, for the reviewer to point out the omissions of examples which he, the reviewer, feels are far more worthy than many of those included. To attempt to do so in this instance, however, would be a most ungenerous act; for Mr. Irving has gathered into his fold so many rare and unexpected things that criticism is forestalled. There are, as Mr. Irving himself acknowledges, many passages of great force and beauty in the field of mountain literature which are not included in *The Mountain Way*, but instead of regretting their absence, let us, rather, seek them out and make for ourselves our own special supplements to this already complete and well-ordered treasury.

It seems superfluous to describe this little volume in any detail, for it should stand for a long time to come as almost the first to be acquired by every lover of mountains.

FRANCIS P. FARQUHAR

<sup>21</sup> *The Mountain Way. An Anthology in Prose and Verse*. Collected by R. L. G. IRVING. E. P. Dutton & Co., Inc., New York. 1938. xxii+656 pages. Price, \$3.00.

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